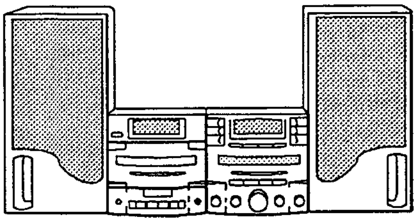
aiwa

# LCX-01



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : α – 14MK II
- BASIC CD MECHANISM : KSL – 2101ABM
- TYPE. H, LH, U, E, K, HD

| SYSTEM | CD PLAYER/ TUNER | CASSETTE DECK/ AMPLIFIER | SPEAKERS | REMOTE CONTROLLER |
|---|---|---|---|---|
| LCX – 01 | RDX – 01 | FX – 01 | SX – 01 | RC – 01 |

# SERVICE MANUAL

020

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# SPECIFICATIONS

## Tuner section

| | |
|---|---|
| **Frequency ranges** | LCX-01 U, LH<br>FM: 87.5-108.0 MHz<br>AM: 530/531-1710/1602 kHz (10/9 kHz step)<br>LCX-01 H<br>FM: 87.5-108.0 MHz<br>AM: 531/530-1602/1600 kHz (9/10 kHz step)<br>LCX-01 E, K<br>FM: 87.5-108.0 MHz<br>MW: 522/530-1611/1600 kHz (9/10 kHz step)<br>LW: 153-288 kHz<br>LCX-01 HD :<br>FM/TV (1-3CH) : 76-108 MHz<br>AM : 522/530-1.629/1.710 kHz<br>(9/10 kHz step) |
| **Antennas** | LCX-01 U, LH, H, HD :<br>Feeder antenna for FM<br>Loop antenna for AM<br>LCX-01 E, K:<br>Feeder antenna for FM<br>Loop antenna for MW and LW |

## Amplifier section

| | |
|---|---|
| **Power output** | LCX-01 H, LH, HD :<br>20 W+20 W (5 ohms, T. H. D. 10 % 1 kHz)<br>LCX-01 E:<br>12 W+12 W (5 ohms, T. H. D. 1 % 1 kHz)<br>LCX-01 K:<br>12 W+12 W (5 ohms, T. H. D. 1 % 1 kHz)<br>15 W+15 W (5 ohms, T. H. D. 10 % 1 kHz)<br>LCX-01 U: **FTC Rule**<br>15 watts per channel, Min RMS at 5 ohms, from 60 Hz to 20 kHz with no more than 3 % distortion. |
| **Input sensitivity (load impedance)** | AUX/DAT/MD/DCC 775 mV (47 k ohms) |

## Cassette deck section

| | |
|---|---|
| **Track format** | 4 tracks/2 channeis |
| **Recording system** | AC bias |
| **Erase system** | AC erase |
| **Tape speed** | 4.8 cm/sec. (1 7/8 ips) |
| **Motor** | DC servomotor (1) |
| **Heads** | Recording/Playback/Erasure head (1) |
| **Frequency response** | Normal tape (Recording/Playback):<br>40-15,000 Hz<br>$CrO_2$ tape (Recording/Playback): 40-16,000 Hz<br>Metal tape (Playback only): 50-16,000 Hz |

## CD player section

| | |
|---|---|
| **Disc** | Compact disc |
| **Scanning method** | Non contact optical scanner (semiconductor laser application) |
| **Laser** | Semiconductor laser $\lambda$ =780 nm |
| **Rotation speed** | Approx. 500-200 rpm/CLV |
| **Error correction** | Cross Interleave, Reed Solomon Code |
| **No. of channels** | 2 channels |
| **D.A. conversion** | 16 bit linear |
| **Frequency response** | 20 Hz-20,000 Hz $^{+3}_{-4}$dB |

## Speaker

| | |
|---|---|
| **Cabinet type** | Bass reflex |
| **Speaker** | 130 mm (5 1/8 in.) cone type woofer<br>50 mm (2 in.) cone type tweeter |
| **Impedance** | 5 ohms |
| **Music power** | 25 W |
| **Output sound pressure level** | 88 dB/W/m |

## General

| | |
|---|---|
| **Power source** | LCX-01 U:<br>AC 120 V/220-240 V (switchable), 50/60 Hz<br>LCX-01 H, LH:<br>AC 110-120 V/220-240 V (switchable), 50/60 Hz<br>LCX-01 E: AC 230 V, 50 Hz<br>LCX-01 K: AC 240 V, 50 Hz<br>LCX-01 HD : AC 100-120V/220-240V (switchable), 50/60 Hz |
| **Power consumption** | LCX-01 H, LH, HD : 48 W<br>LCX-01 U: 60 W<br>LCX-01 E, K: 115 W |
| **Dimensions (W x H x D)** | FX-01 (Cassette deck/Amplifier unit):<br>148 x 146 x 260 mm (5 7/8 x 5 6/8 x 10 1/4 in.)<br>RDX-01 (CD player/Tuner unit):<br>148 x 146 x 220 mm (5 7/8 x 5 6/8 x 8 5/8 in.)<br>SX-01 (Speaker):<br>146 x 292 x 200 mm (5 6/8 x 11 4/8 x 7 7/8 in.) |
| **Weight** | FX-01: 3.5 kg (7.7 lbs.)<br>RDX-01: 2.0 kg (4.4 lbs.)<br>SX-01: 2.5 kg (5.5 lbs.) |

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  Under license from BBE Sound, Inc.

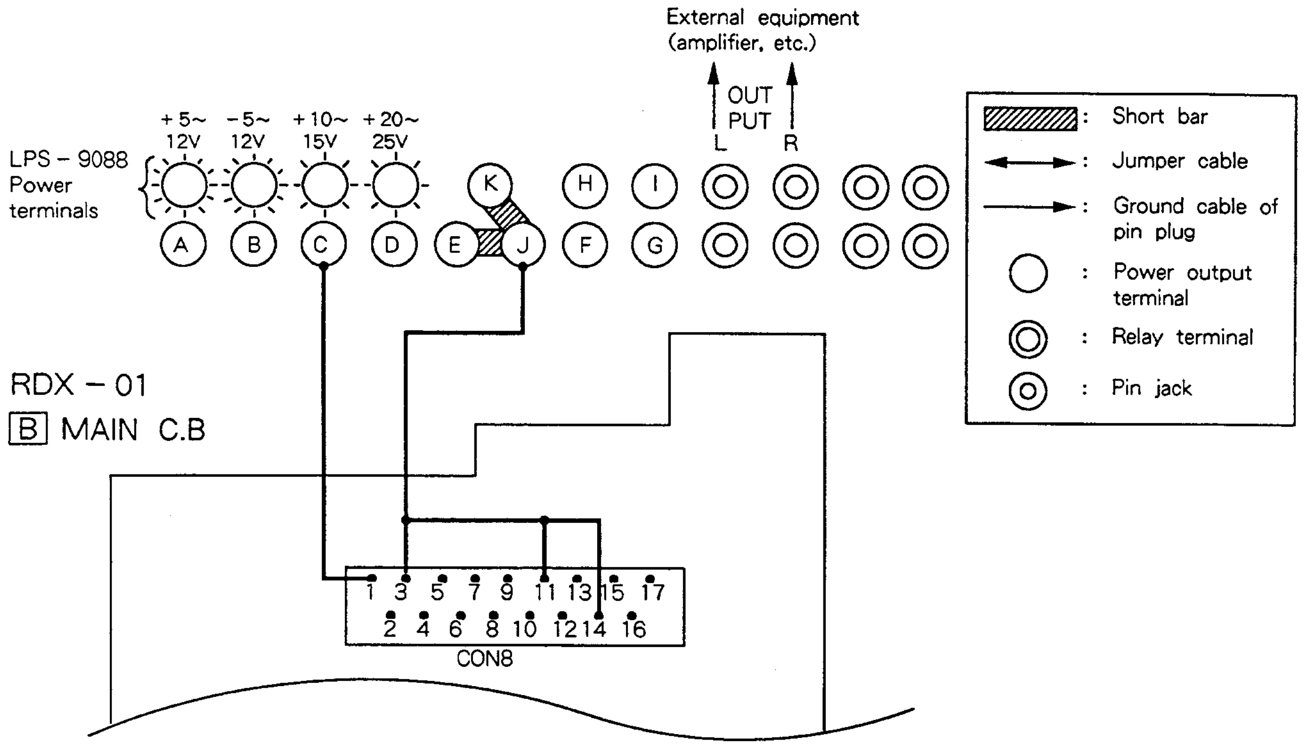
# CAUTIONS WHEN SERVICING

## FX-01 :

FX-01 has a power supply circuit, but it has no power switch. So, when attempting to repair FX-01, connect a registor of 10K to 100K Ω between pin① (DC 16V) and pin⑦ (PWR CONT) of the FG cable (CON8).

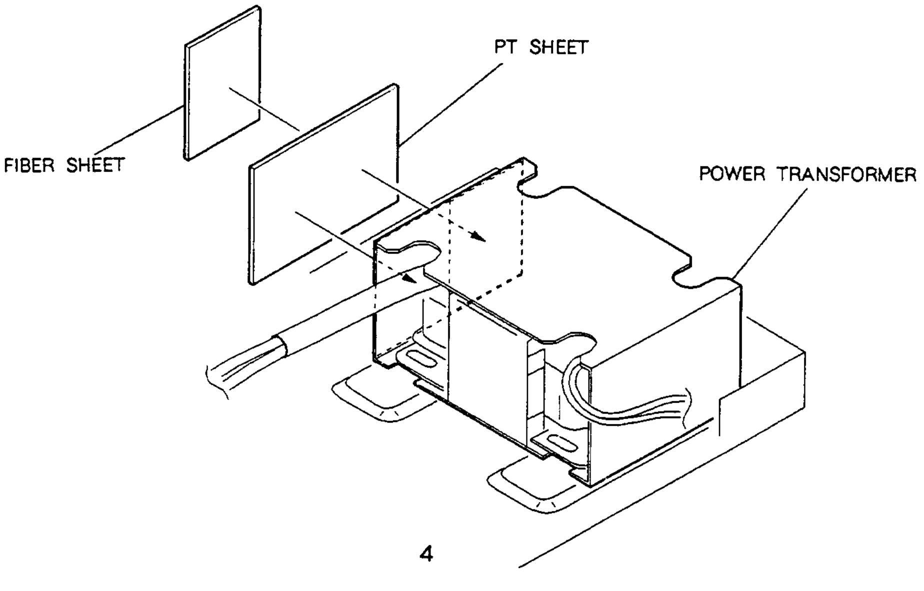
## RDX-01 :

RDX-01 has no power supply circuit. It receives power through 17-pin FG cable together with input and output signals. When repairing RDX-01, connect the cable to FX-01. If FX-01 is not available, connect the multi-power supply (LSP-9088) with pin① (DC 16V), pin③ (PWR GND), pin⑪ (V GND) and pin⑭ (A GND) of the FG cable (CON8) as follows.


External equipment
(amplifier, etc.)
OUT
PUT
L
R
+5~ 12V
-5~ 12V
+10~ 15V
+20~ 25V
LPS - 9088
Power
terminals
A
B
C
D
E
J
K
H
I
F
G
RDX - 01
B MAIN C.B
1 3 5 7 9 11 13 15 17
2 4 6 8 10 12 14 16
CON8
▨ : Short bar
⟷ : Jumper cable
→ : Ground cable of pin plug
○ : Power output terminal
◎ : Relay terminal
◎ : Pin jack

## Caution when replacing the power transformer

When replacing the power transformer (PT101), the PT and fiber sheets must be replaced with new.
Peel the protection tape of the PT and fiber sheets. Paste the PT sheet first, and then fiber sheet at the position as illustration shown.
(Take care not to touch the AC cord to frame of the power transformer directly.)


PT SHEET
FIBER SHEET
POWER TRANSFORMER

## MODEL No.

# FX – 01

## DISASSEMBLY INSTRUCTIONS (FX – 01)

1. **"Cabinet, Steel" Removal** (See Figure – 1)
   1) Remove the 5 screws (Ⓐ) and remove the "Cabinet, Steel".

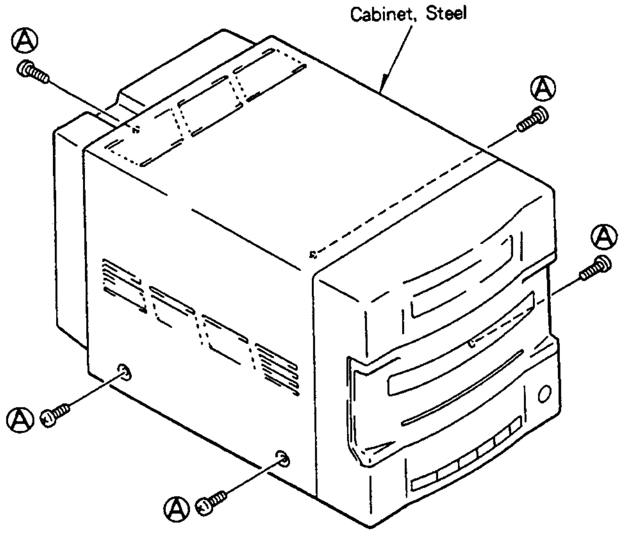

Ⓐ
Cabinet, Steel
Ⓐ
Ⓐ
Ⓐ
Ⓐ

Fig – 1

2. **"Board, PT" and "Board, Deck" Removal** (See Figure – 2)
   1) Remove the 2 screws (Ⓐ) and disconnect the 2 connectors (PIN2, PIN3). Then remove the "Board, PT".
   2) Remove the 2 screws (Ⓑ) and disconnect the connector (PIN 5). Then remove "Board, Deck".

Note)
Connect the LCX-01 (FX-01) extension jig kit to the places a and b in the figure.

| Part name | Part No. | Component |
|---|---|---|
| LCX-01 (FX-01) extension jig kit | 09-001-247-010 | Jig kit |
| | 09-001-248-010 | P.C.B ASSY |

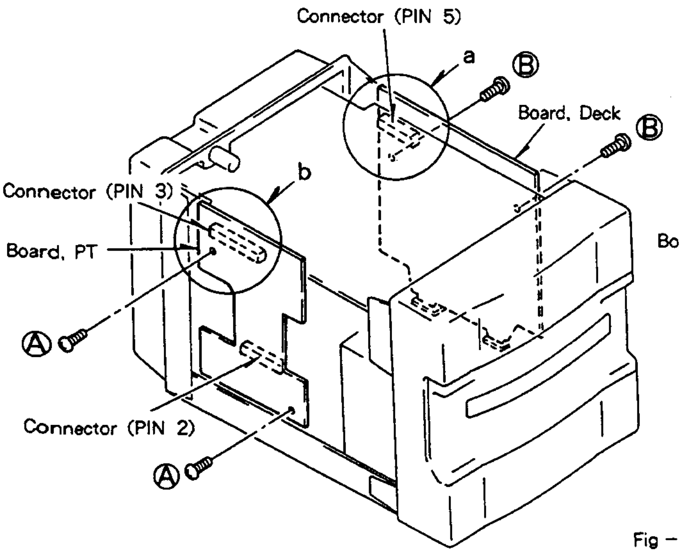

Connector (PIN 5)
a
Ⓑ
Board, Deck
Ⓑ
b
Connector (PIN 3)
Board, PT
Ⓐ
Connector (PIN 2)
Ⓐ

Fig – 2

3. **"Board, Main" Removal** (See Figure – 3)
   1) Remove the 5 screws (Ⓐ× 2, Ⓑ× 2, Ⓒ× 1) and disconnect the 3 connectors (CON4, PIN7, PIN6). Then remove "Board, Main".

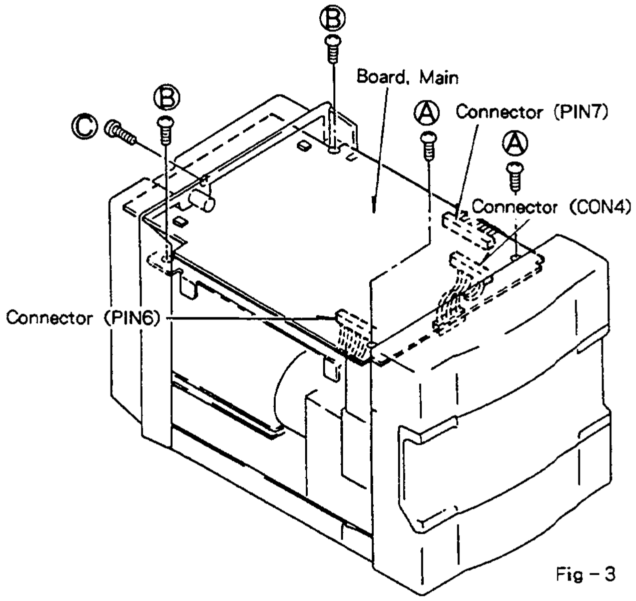

Ⓑ
Board, Main
Ⓑ
Ⓐ Connector (PIN7)
Ⓒ
Ⓐ
Connector (CON4)
Connector (PIN6)

Fig – 3

4. **"Cabinet, Front" Removal** (See Figure – 4)
   1) Remove the 4 screws (Ⓐ) and remove "Cabinet, Front".

5. **"Board, Power" Removal** (See Figure – 4)
   1) Remove the 4 screws (Ⓑ× 3, Ⓒ× 1) and remove "Board, Power".

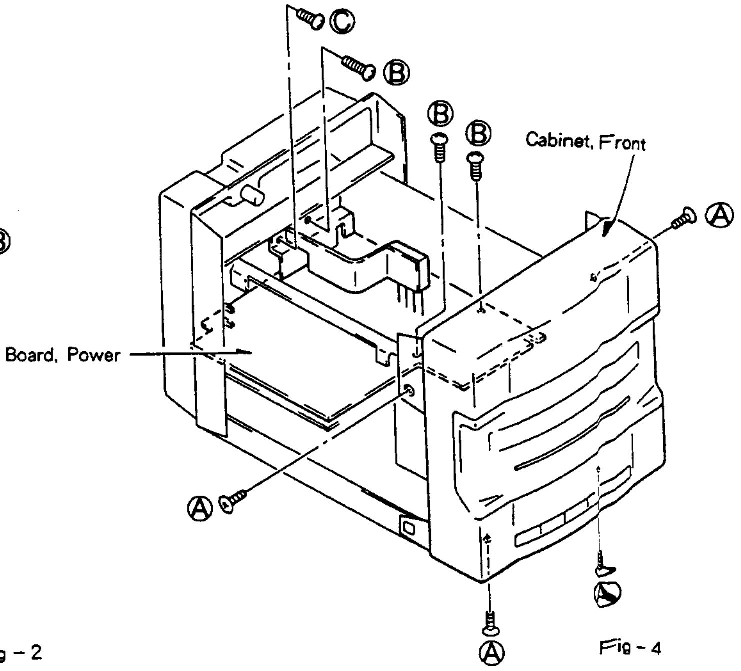

Ⓒ
Ⓑ
Ⓑ
Ⓑ
Cabinet, Front
Ⓐ
Board, Power
Ⓐ
Ⓐ
Ⓐ

Fig – 4

# ELECTRICAL MAIN PARTS LIST (FX – 01)

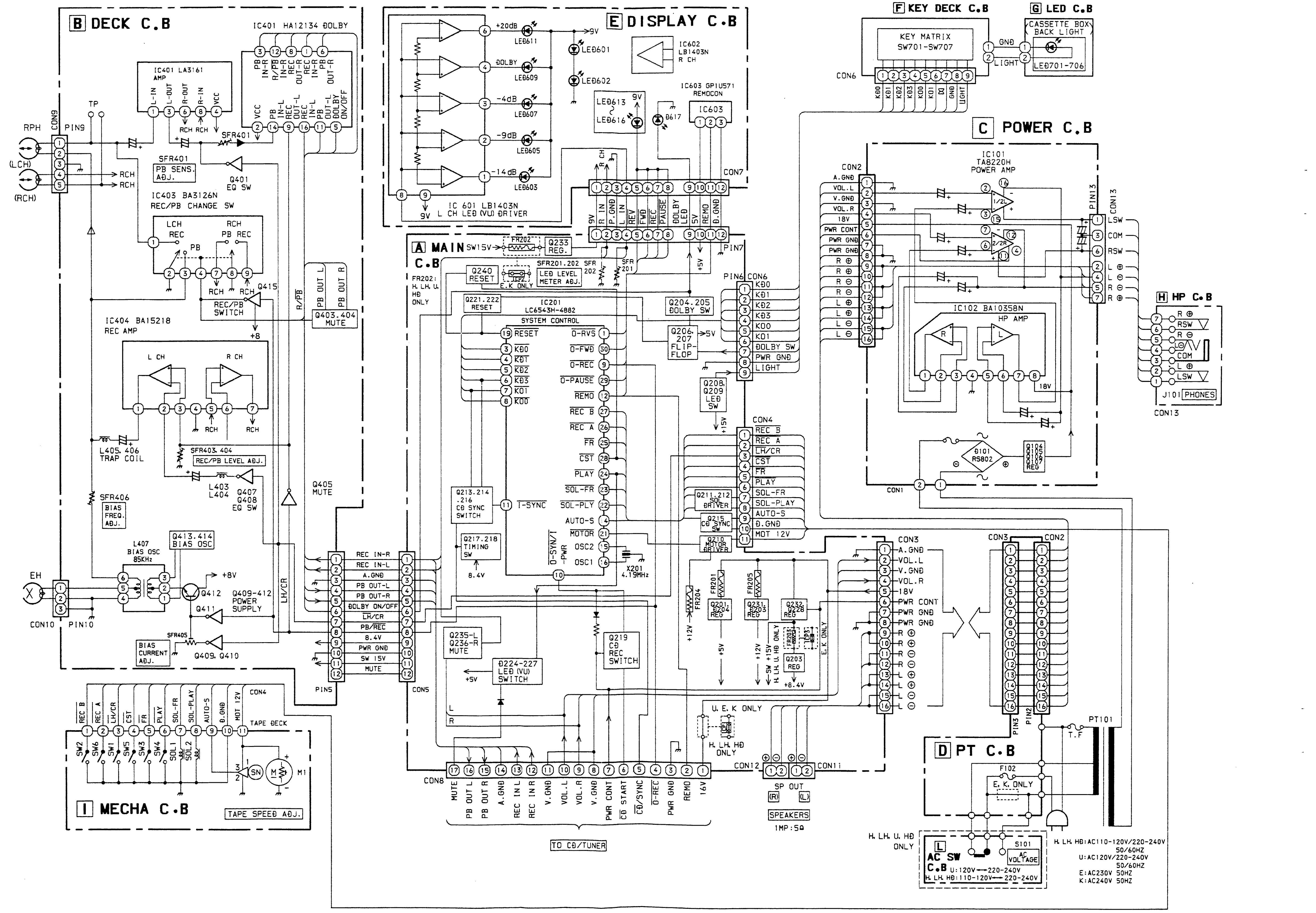
| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| ===IC=== | | |
| | 87-001-441-019 | IC, BA10358N |
| | 87-001-440-019 | IC, BA15218N |
| | 87-002-454-019 | IC, BA3126N |
| | 87-002-669-010 | IC, GP1U571X(REMOTE SENSOR) |
| | 87-001-874-019 | IC, HA12134A |
| | △87-001-132-019 | IC, ICP-N38(U, E, K) |
| | △87-002-330-019 | IC, ICP-N5(E, K) |
| | 87-027-539-019 | IC, LA3161 |
| | 87-020-135-019 | IC, LB1403N |
| | 87-001-334-010 | IC, LB9051A |
| | 81-NWB-613-010 | IC, LC6543H-4882 |
| | 87-002-226-019 | IC, TA8220H |
| ===TRANSISTOR=== | | |
| | 89-112-965-019 | TRANSISTOR, 2SA1296GR |
| | 87-026-463-019 | TRANSISTOR, 2SA933S(RS) |
| | 89-109-521-019 | TRANSISTOR, 2SA952K |
| | 89-212-923-019 | TRANSISTOR, 2SB1292F |
| | 89-212-892-019 | TRANSISTOR, 2SB1289E |
| | 87-026-462-019 | TRANSISTOR, 2SC1740S(RS) |
| | 89-320-011-019 | TRANSISTOR, 2SC2001K |
| | 89-333-317-019 | TRANSISTOR, 2SC3331TU |
| | 89-420-053-019 | TRANSISTOR, 2SD2005R |
| | 89-420-611-019 | TRANSISTOR, 2SD2061E F |
| | 87-026-216-019 | TRANSISTOR, DTA124ES |
| | 87-026-290-019 | TRANSISTOR, DTA124XS |
| | 87-026-464-019 | TRANSISTOR, DTC114TS |
| | 87-026-217-019 | TRANSISTOR, DTC124ES |
| | 87-026-291-019 | TRANSISTOR, DTC124XS |
| | 87-026-218-019 | TRANSISTOR, DTC144ES |
| ===DIODE=== | | |
| | 87-001-783-019 | DIODE 1N4002-T |
| | 87-020-465-019 | DIODE 1SS133 T-72 |
| | 87-002-592-019 | DIODE RS802 |
| | 87-027-417-019 | DIODE, ZENER HZ11A1L |
| | 87-027-368-019 | DIODE, ZENER HZ12B1L |
| | 87-027-469-019 | DIODE, ZENER HZ16-2 |
| | 87-020-467-019 | DIODE, ZENER HZ2BLL |
| | 87-027-332-019 | DIODE, ZENER HZ6B1L |
| | 87-027-584-019 | DIODE, ZENER HZ9C1L |
| ===MAIN CIRCUIT BOARD SECTION=== | | |
| C201 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C202 | ★87-010-384-019 | CAP, ELECT 100-25 SME |
| C203 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C204 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C205 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C206 | ★87-010-371-019 | CAP, ELECT 470-6.3 |
| C207 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C209 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C210 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C211 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C212 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C217 | ★87-010-384-019 | CAP, ELECT 100-25 SME |
| C218 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C219 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C221 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C225 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C226 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C227 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C229 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C230 | ★87-010-265-019 | CAP, ELECT 33-16 SME |
| C232 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C233 | ★87-010-402-019 | CAP, ELECT 2.2-50 SME |
| C234 | ★87-010-402-019 | CAP, ELECT 2.2-50 SME |
| C245 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C246 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| △FR201 | 87-029-105-019 | RES, FUSE 10-1/2W FM |
| △FR202 | 87-029-125-019 | RES, FUSE 1-1/4W(H, LH, U, HD) |
| △FR203 | 87-029-015-019 | RES, FUSE 10-1/4W FM(H, LH, U, HD) |
| △FR204 | 87-029-108-019 | RES, FUSE 1.0-1/2W FM |
| △FR205 | 87-029-108-019 | RES, FUSE 1.0-1/2W FM |
| L201 | ★87-003-149-019 | COIL 47UH |
| L202 | ★87-008-302-019 | FILTER EMI BL 01RN1 |
| SFR201 | ★87-024-175-019 | SFR, 47K DIA6 V |
| SFR202 | ★87-024-175-019 | SFR, 47K DIA6 V |
| X201 | ★87-030-203-019 | VIB, CERAMIC KBR4.19MKS |
| ===DECK CIRCUIT BOARD SECTION=== | | |
| C401 | ★87-018-128-019 | CAP, CERA-SOL SS 560P-50 B |
| C402 | ★87-018-128-019 | CAP, CERA-SOL SS 560P-50 B |
| C403 | ★87-010-402-019 | CAP, ELECT 2.2-50 SME |
| C404 | ★87-010-402-019 | CAP, ELECT 2.2-50 SME |
| C407 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C408 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C409 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C410 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C413 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C414 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C415 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C416 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C417 | ★87-010-545-019 | CAP, ELECT 0.22-50 SME |
| C418 | ★87-010-545-019 | CAP, ELECT 0.22-50 SME |
| C419 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C420 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C421 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C422 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C423 | ★87-018-111-019 | CAP, CERA-SOL SS 27P-50 SL |
| C424 | ★87-018-111-019 | CAP, CERA-SOL SS 27P-50 SL |
| C425 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C426 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C427 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C428 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C429 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C430 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C431 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C432 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C433 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C434 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C435 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C436 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C437 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C438 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C439 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C440 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C445 | ★87-018-121-019 | CAP, CERA-SOL SS 150P-50 B |
| C446 | ★87-018-121-019 | CAP, CERA-SOL SS 150P-50 B |
| C447 | ★87-018-200-019 | CAP, CERA-SOL SS 3900P-16X |
| C448 | ★87-018-200-019 | CAP, CERA-SOL SS 3900P-16X |
| C449 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C450 | ★87-014-077-019 | CAP, PP 6800P-100 J |
| C451 | ★87-018-122-019 | CAP, CERA-SOL SS 180P-50 B |
| C452 | ★87-018-122-019 | CAP, CERA-SOL SS 180P-50 B |
| C453 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C454 | ★87-010-384-019 | CAP, ELECT 100-25 SME |
| C456 | ★87-018-133-019 | CAP, CERA-SOL SS 4700P-16 X |
| C458 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C459 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C460 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C461 | ★87-018-116-019 | CAP, CERA-SOL SS 56P-50 SL |
| C462 | ★87-018-116-019 | CAP, CERA-SOL SS 56P-50 SL |
| C463 | ★87-018-133-019 | CAP, CERA-SOL SS 4700P-16 X |
| C464 | ★87-018-133-019 | CAP, CERA-SOL SS 4700P-16 X |
| L403 | ★87-005-526-019 | COIL 5.6MMH-J |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| L404 | ★87-005-526-019 | COIL 5.6MMH-J |
| L405 | ★87-005-525-019 | COIL 22MMH-J |
| L406 | ★87-005-525-019 | COIL 22MMH-J |
| L407 | ★80-CD3-620-019 | COIL BIAS OSC |
| SFR401 | ★87-024-173-019 | SFR, 22K DIA6 V |
| SFR402 | ★87-024-173-019 | SFR, 22K DIA6 V |
| SFR403 | ★87-024-172-019 | SFR, 10K DIA6 V |
| SFR404 | ★87-024-172-019 | SFR, 10K DIA6 V |
| SFR405 | ★87-024-171-019 | SFR, 4.7K DIA6 V |
| SFR406 | ★87-024-173-019 | SFR, 22K DIA6 V |
| ===POWER CIRCUIT BOARD SECTION=== | | |
| ⚠ | ★87-033-213-019 | CLAMP, FUSE SMK(U, E, K) |
| C105 | ★87-010-403-019 | CAP, ELECT 3.3-50 SME |
| C106 | ★87-010-403-019 | CAP, ELECT 3.3-50 SME |
| C107 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C108 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C109 | ★87-010-265-019 | CAP, ELECT 33-16 SME |
| C110 | ★87-010-265-019 | CAP, ELECT 33-16 SME |
| C111 | ★87-010-402-019 | CAP, ELECT 2.2-50 SME(H, LH, U, HD) |
| C111 | ★87-010-400-019 | CAP, ELECT 0.47-50 SME(E, K) |
| C112 | ★87-010-402-019 | CAP, ELECT 2.2-50 SME(H, LH, U, HD) |
| C112 | ★87-010-400-019 | CAP, ELECT 0.47-50 SME(E, K) |
| C113 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C114 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C115 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C116 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C121 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C122 | ★87-010-260-019 | CAP, ELECT 47-25 SME |
| C125 | ★87-010-388-019 | CAP, ELECT 1000-25V SME (H, LH, U, HD) |
| C125 | ★87-016-135-019 | CAP, ELECT 1000-25 KME(E, K) |
| C126 | ★87-015-577-019 | CAP, ELECT 6800-35VR(H, LH, U, HD) |
| C126 | ★87-016-190-019 | CAP, ELECT 4700-35 105KME(E, K) |
| C133 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C134 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C135 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C136 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C137 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C138 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| ⚠F101 | 87-035-432-010 | FUSE, 7A 125V LEAD(H, LH, HD) |
| ⚠F101 | 87-035-371-019 | FUSE, 6.3A 125V UL/D(U) |
| ⚠F101 | 87-035-351-010 | FUSE, T 6.3A(E, K) |
| R131 | ★87-025-329-019 | RES, NF 2.2-1/4W |
| R132 | ★87-025-329-019 | RES, NF 2.2-1/4W |
| R133 | ★87-025-329-019 | RES, NF 2.2-1/4W |
| R134 | ★87-025-329-019 | RES, NF 2.2-1/4W |
| ===PT CIRCUIT BOARD SECTION=== | | |
| ⚠ | ★82-033-213-019 | CLAMP, FUSE SMK |
| | ★82-304-743-019 | TERMINAL 1P |
| ⚠F102 | 87-035-390-019 | FUSE, 1.6A 250V A-RUSH(H, LH, HD) |
| ⚠F102 | 87-035-372-010 | FUSE, 1.6A 250V UL(U) |
| ⚠F102 | 87-035-221-019 | FUSE, 800mA T(E, K) |
| ⚠PT101 | 81-NWB-631-019 | POWER TRANSFORMER H(H, LH, HD) |
| ⚠PT101 | 81-NWB-629-019 | POWER TRANSFORMER U(U) |
| ⚠PT101 | 81-NWB-630-019 | POWER TRANSFORMER E(E) |
| ⚠PT101 | 81-NWB-632-019 | POWER TRANSFORMER K(K) |
| ===DISPLAY CIRCUIT BOARD SECTION=== | | |
| C601 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C602 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| LED601 | 87-002-851-019 | LED SLB 55YY(-∞) |
| LED602 | 87-002-851-019 | LED SLB 55YY(-∞) |
| LED603 | 87-002-851-019 | LED SLB 55YY(-14) |
| LED604 | 87-002-851-019 | LED SLB 55YY(-14) |
| LED605 | 87-002-851-019 | LED SLB 55YY(-8) |
| LED606 | 87-002-851-019 | LED SLB 55YY(-8) |
| LED607 | 87-002-851-019 | LED SLB 55YY(-4) |
| LED608 | 87-002-851-019 | LED SLB 55YY(-4) |
| LED609 | 87-002-851-019 | LED SLB 55YY(DᗡO) |
| LED610 | 87-002-851-019 | LED SLB 55YY(DᗡO) |
| LED611 | 87-002-851-019 | LED SLB 55YY(+2) |
| LED612 | 87-002-851-019 | LED SLB 55YY(+2) |
| LED613 | 87-001-704-019 | LED SLB 55MG(◀REV) |
| LED614 | 87-001-704-019 | LED SLB 55MG(▶FWD) |
| LED615 | 87-001-705-019 | LED SLB 55VR(REC) |
| LED616 | 87-002-851-019 | LED SLB 55YY(PAUSE) |
| LED617 | 87-001-704-019 | LED SLB 55MG(DOLBY NR) |
| ===KEY DECK CIRCUIT BOARD SECTION=== | | |
| S701 | ★87-036-215-019 | TACT SW(DOLBY NR) |
| S702 | ★87-036-215-019 | TACT SW(●REC) |
| S703 | ★87-036-215-019 | TACT SW(◀◀) |
| S704 | ★87-036-215-019 | TACT SW(◀ ▶PLAY/DIR) |
| S705 | ★87-036-215-019 | TACT SW(▶▶) |
| S706 | ★87-036-215-019 | TACT SW(■STOP/DIR) |
| S707 | ★87-036-215-019 | TACT SW(❚❚PAUSE) |
| ===LED CIRCUIT BOARD SECTION=== | | |
| LED701 | ★87-002-811-010 | LED GL1HY111 (CASSETTE BOX BACK LIGHT) |
| LED702 | ★87-002-811-010 | LED GL1HY111 (CASSETTE BOX BACK LIGHT) |
| LED703 | ★87-002-811-010 | LED GL1HY111 (CASSETTE BOX BACK LIGHT) |
| LED704 | ★87-002-811-010 | LED GL1HY111 (CASSETTE BOX BACK LIGHT) |
| LED705 | ★87-002-811-010 | LED GL1HY111 (CASSETTE BOX BACK LIGHT) |
| LED706 | ★87-002-811-010 | LED GL1HY111 (CASSETTE BOX BACK LIGHT) |
| ===HP CIRCUIT BOARD SECTION=== | | |
| J101 | ★87-009-216-019 | JACK DIA 3.5 STS(PHONES) |
| ===MECHA CIRCUIT BOARD SECTION=== | | |
| SOL1 | ★86-575-622-019 | SOLENOID ASSY(FR) |
| SOL2 | ★86-575-622-019 | SOLENOID ASSY(PLAY) |
| SW1 | 87-036-110-019 | PUSH SW(CrO2) |
| SW2 | 87-036-110-019 | PUSH SW(REB) |
| SW3 | 86-575-632-010 | FR SW(FR) |
| SW4 | 87-036-110-019 | PUSH SW(PLAY) |
| SW5 | 87-036-110-019 | PUSH SW(CST) |
| SW6 | 87-036-109-019 | PUSH SW(REA) |
| ===RELAY CIRCUIT BOARD SECTION=== | | |
| ===REG CIRCUIT BOARD SECTION=== | | |
| ===AC SW CIRCUIT BOARD SECTION(EXCEPT E, K)=== | | |
| ⚠S101 | 87-031-780-019 | SW, SLIDE(AC VOLTAGE) |
| ===MISCELLANEOUS=== | | |
| ⚠ | ★87-034-761-010 | AC CORD, H 2M OFC BLK(H, LH, HD) |
| ⚠ | ★87-034-584-019 | AC CORD, U SPT-2(U) |
| ⚠ | ★82-187-797-019 | AC CORD E(E) |
| ⚠ | ★82-187-796-019 | AC CORD BS(K) |
| ⚠ | ★87-085-184-019 | BUSHING, AC CORD D(H, LH, HD) |
| ⚠ | ★87-085-189-010 | BUSHING, AC CORD U(U) |
| ⚠ | ★87-085-185-010 | BUSHING, AC CORD E(E, K) |
| CON9 | ★81-NWB-620-019 | CONNECTOR ASSY, 5P RPH |
| CON10 | ★81-NWB-621-019 | CONNECTOR ASSY, 3P EH |
| M1 | 87-045-296-019 | MOTOR EG-530 AD, 2B(DECK MOTOR) |
| RPEH | 87-046-356-019 | R.P.E HEAD |

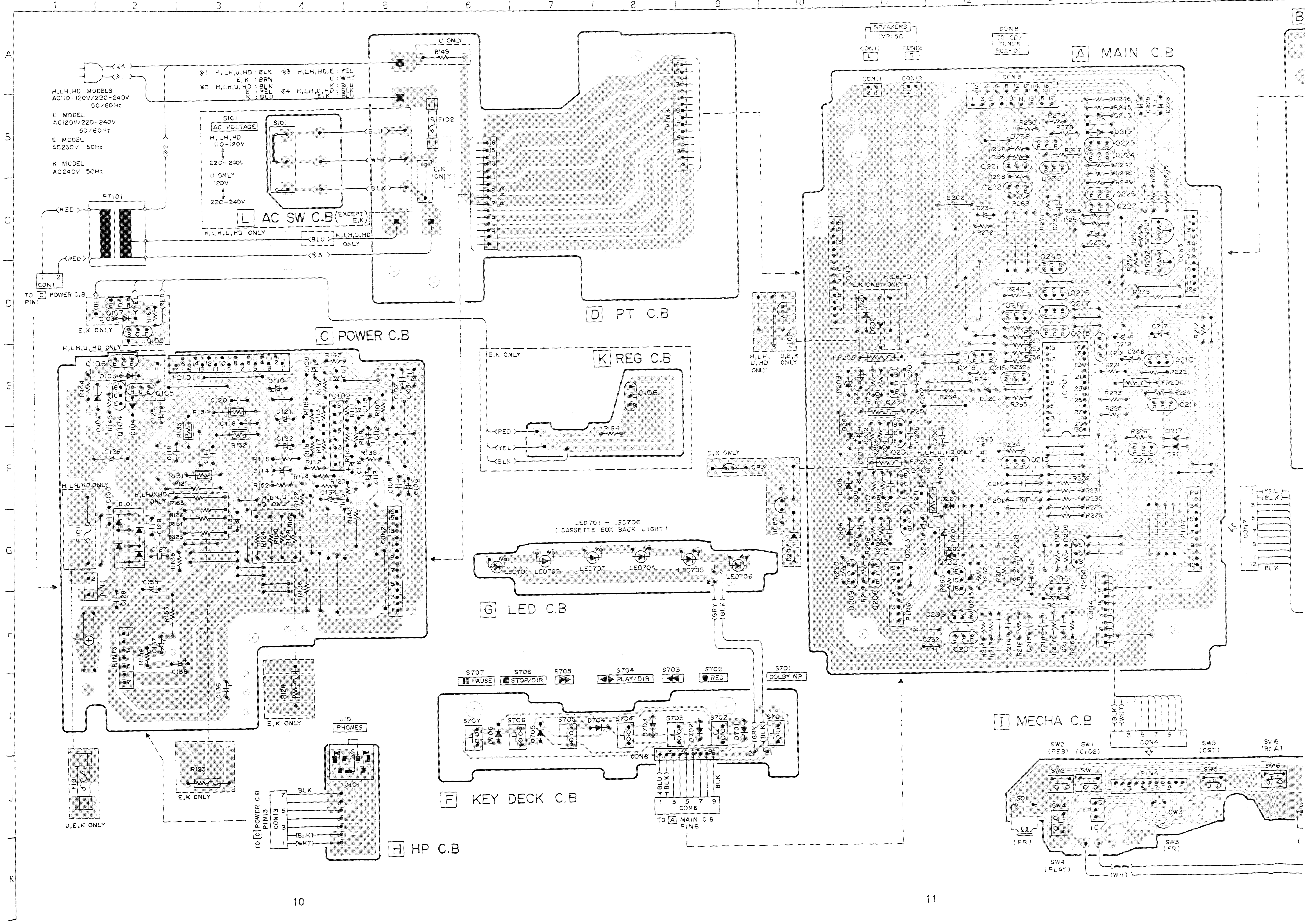
**CAUTION:**

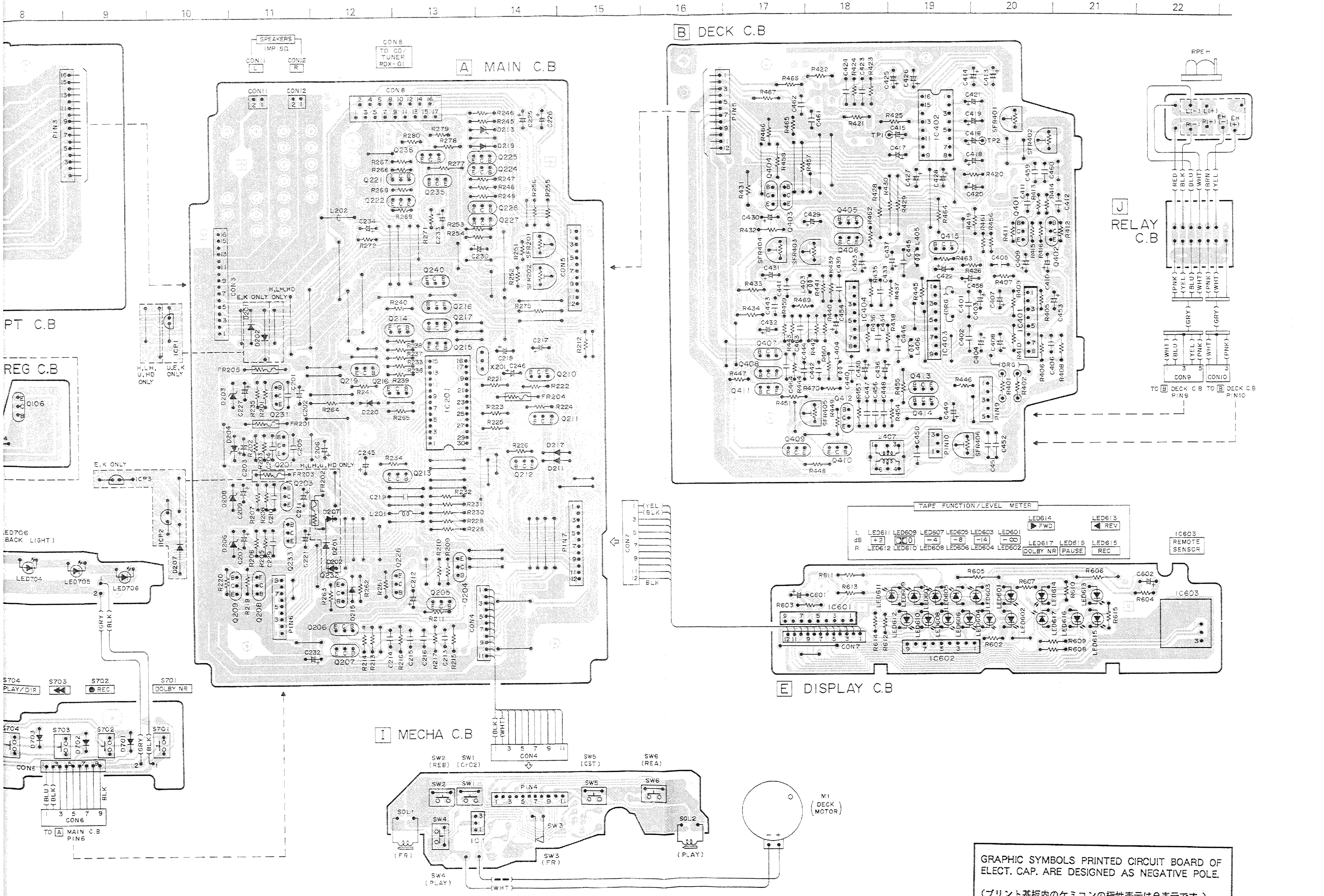
Replace the PT and fiber sheets together when replacing the power transformer(PT101)(See page 4).

# BLOCK DIAGRAM (FX – 01)


B DECK C.B
IC401 HA12134 DOLBY
IC401 LA3161 AMP
IC403 BA3126N REC/PB CHANGE SW
IC404 BA15218 REC AMP
SFR401 PB SENS. ADJ.
Q401 EQ SW
Q415 REC/PB SWITCH
Q403.404 MUTE
L405.406 TRAP COIL
SFR403.404 REC/PB LEVEL ADJ.
L403 L404
Q407 Q408 EQ SW
Q405 MUTE
SFR406 BIAS FREQ. ADJ.
L407 BIAS OSC 85KHz
Q413.414 BIAS OSC
Q412
Q409-412 POWER SUPPLY
Q411
SFR405
BIAS CURRENT ADJ.
Q409.Q410
RPH
(LCH)
(RCH)
CON9
PIN9
TP
EH
CON10
PIN10
E DISPLAY C.B
IC602 LB1403N R CH
IC603 GP1U571 REMOCON
IC 601 LB1403N L CH LED (VU) DRIVER
+20dB LED611
DOLBY LED609
-4dB LED607
-9dB LED605
-14dB LED603
LED601
LED602
LED613 ~ LED616
D617
CON7
A MAIN C.B
FR202: H. LH. U. HD ONLY
FR202
Q233 REG.
Q240 RESET
E.K ONLY
SFR201.202 SFR LED LEVEL METER ADJ.
Q221.222 RESET
IC201 LC6543H-4882 SYSTEM CONTROL
Q204.205 DOLBY SW
Q206. 207 FLIP-FLOP
Q208. Q209 LED SW
Q213.214 .216 CD SYNC SWITCH
Q217.218 TIMING SW
X201 4.19MHz
Q211.212 SOL DRIVER
Q215 CD SYNC SW
Q210 MOTOR DRIVER
Q235-L Q236-R MUTE
D224-227 LED (VU) SWITCH
Q219 CD REC SWITCH
Q201. Q204 REG
Q231. Q203 REG
Q232. Q228 REG
Q203 REG
FR201
FR205
FR204
U. E. K ONLY
H. LH. HD ONLY
CON4
CON5
PIN5
PIN6 CON6
PIN7
CON8
TO CD/TUNER
CON12
CON11
SP OUT (R) (L)
SPEAKERS 1MP: 5Ω
F KEY DECK C.B
KEY MATRIX SW701-SW707
CON6
G LED C.B
CASSETTE BOX BACK LIGHT
LED701-706
C POWER C.B
IC101 TA8220H POWER AMP
IC102 BA10358N HP AMP
D101 RS802
Q104 Q105 Q106 Q107 REG
CON1
CON2
CON3
PIN13
CON13
H HP C.B
J101 PHONES
CON13
D PT C.B
F102
E. K. ONLY
T.F
PT101
PIN3
PIN2
L AC SW C.B
S101 AC VOLTAGE
U: 120V ⟷ 220-240V
H. LH. HD: 110-120V ⟷ 220-240V
H. LH. U. HD ONLY
H. LH. HD: AC110-120V/220-240V 50/60HZ
U: AC120V/220-240V 50/60HZ
E: AC230V 50HZ
K: AC240V 50HZ
I MECHA C.B
CON4
TAPE DECK
SW2 SW6 SW1 SW5 SW3 SW4 SOL1 SOL2
SN
M1
TAPE SPEED ADJ.

WIRING – 1 (FX – 01)

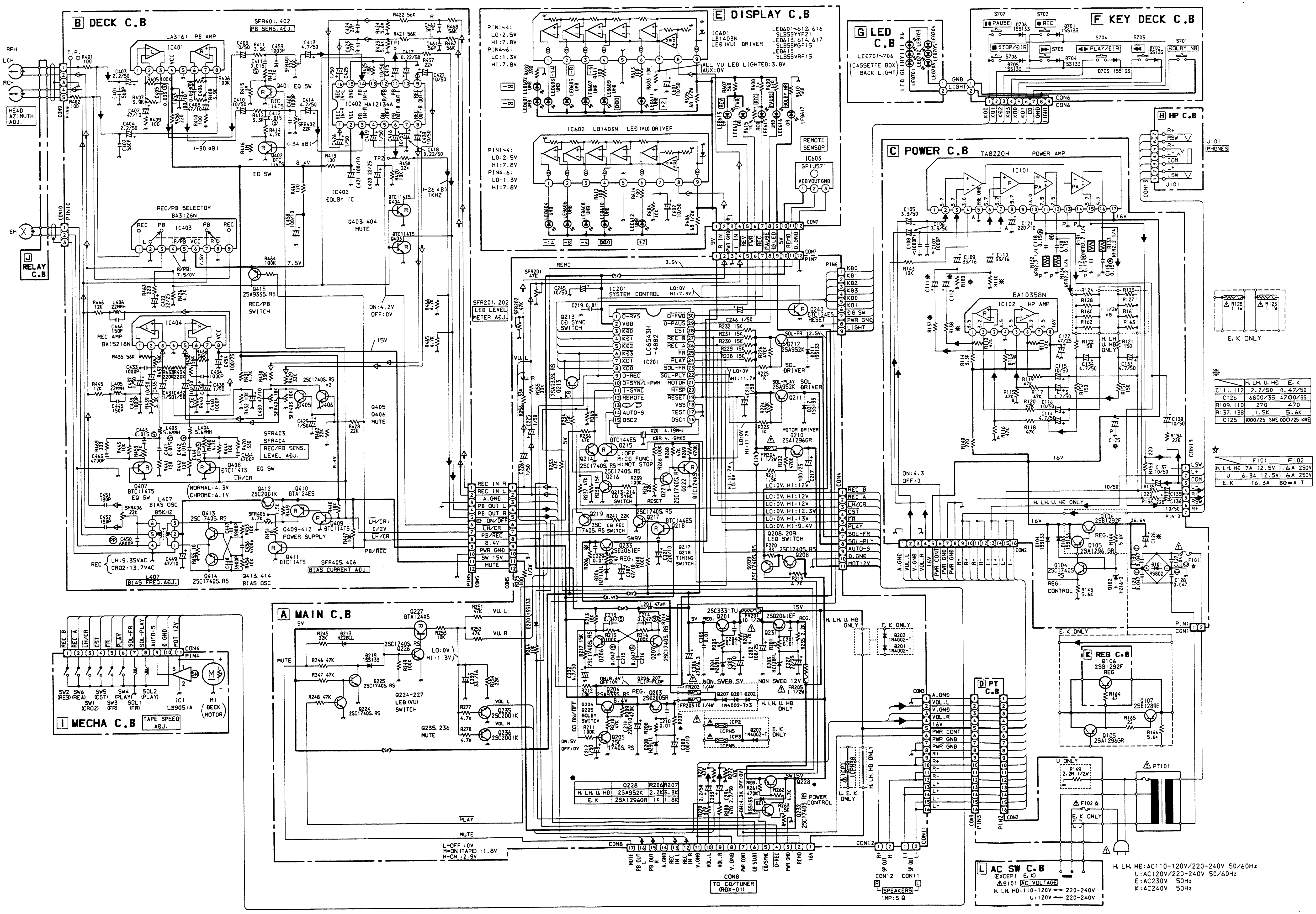

A MAIN C.B
B
C POWER C.B
D PT C.B
F KEY DECK C.B
G LED C.B
H HP C.B
I MECHA C.B
K REG C.B
L AC SW C.B (EXCEPT E,K)
H,LH,HD MODELS AC110-120V/220-240V 50/60Hz
U MODEL AC120V/220-240V 50/60Hz
E MODEL AC230V 50Hz
K MODEL AC240V 50Hz
※1 H,LH,U,HD : BLK / E,K : BRN
※2 H,LH,U,HD : BLK / E : YEL / K : BLU
※3 H,LH,HD,E : YEL / U : WHT / K : BLU
※4 H,LH,U,HD : BLK / E,K : BLU
S101 AC VOLTAGE
H,LH,HD 110-120V ↕ 220-240V
U ONLY 120V ↕ 220-240V
H,LH,U,HD ONLY
E,K ONLY
U,E,K ONLY
PT101
F101
F102
R149 U ONLY
SPEAKERS IMP: 5Ω
CON11 L
CON12 R
CON8 TO CD/TUNER RDX-01
LED701 ~ LED706 (CASSETTE BOX BACK LIGHT)
S707 PAUSE
S706 STOP/DIR
S705
S704 PLAY/DIR
S703
S702 REC
S701 DOLBY NR
J101 PHONES
TO C POWER C.B PIN13
TO A MAIN C.B PIN6
TO C POWER C.B
SW2 (REB)
SW1 (CrO2)
SW5 (CST)
SW6 (REA)
SW3 (FR)
SW4 (PLAY)
SOL1 (FR)
IC201
IC101
IC102
CON1
CON2
CON3
CON4
CON5
CON6
CON7
CON13
PIN1
PIN2
PIN3
PIN4
PIN6
PIN7
PIN13
ICP1
ICP2
ICP3
A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16


8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
SPEAKERS IMP 5Ω
CON11
CON12
CON8 TO CD/ TUNER RDX-01
A MAIN C.B
B DECK C.B
J RELAY C.B
RPE H
PT C.B
REG C.B
E DISPLAY C.B
I MECHA C.B
TAPE FUNCTION/LEVEL METER
IC603 REMOTE SENSOR
LED706 (BACK LIGHT)
S704 PLAY/DIR
S703
S702 REC
S701 DOLBY NR
TO A MAIN C.B PIN6
TO B DECK C.B PIN9
TO B DECK C.B PIN10
SW2 (REB)
SW1 (CrO2)
SW5 (CST)
SW6 (REA)
SW3 (FR)
SW4 (PLAY)
SOL1 (FR)
SOL2 (PLAY)
M1 (DECK MOTOR)
CON4
CON6
CON7
PIN4
IC601
IC602
IC603
IC201
IC402
IC403
IC404
E,K ONLY
H,LH,HD ONLY
H,LH,U,HD ONLY

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

（プリント基板内のケミコンの極性表示は⊖表示です。）

## SCHEMATIC DIAGRAM – 1 (FX – 01)


B DECK C.B
LA3161 PB AMP
IC401
HEAD AZIMUTH ADJ.
SFR401, 402 PB SENS. ADJ.
IC402 HA12134A
IC402 DOLBY IC
EQ SW
REC/PB SELECTOR BA3126N
IC403
IC404
REC AMP BA15218N
Q403, 404 MUTE
Q405 Q406 MUTE
2SA933S RS REC/PB SWITCH
SFR403 SFR404 REC/PB SENS. LEVEL ADJ.
Q409-412 POWER SUPPLY
SFR405, 406 BIAS CURRENT ADJ.
Q413, 414 BIAS OSC
L407 BIAS FREQ. ADJ.
J RELAY C.B
E DISPLAY C.B
IC601 LB1403N LED (VU) DRIVER
IC602 LB1403N LED (VU) DRIVER
REMOTE SENSOR IC603 GP1U571
G LED C.B
CASSETTE BOX BACK LIGHT
F KEY DECK C.B
PAUSE
REC
STOP/EIR
PLAY/EIR
DOLBY NR
H HP C.B
J101 PHONES
C POWER C.B
TA8220H POWER AMP IC101
BA10358N IC102 HP AMP
E.K ONLY
SFR201, 202 LED LEVEL METER ADJ.
IC201 SYSTEM CONTROL
LC6543H-4882
Q240 RESET
SOL DRIVER
SOL-PLAY SOL DRIVER
MOTOR DRIVER
Q208, 209 LED SWITCH
A MAIN C.B
Q224-227 LED (VU) SWITCH
Q235, 236 MUTE
Q201 REG.
Q204 Q205 DOLBY SWITCH
Q228 POWER CONTROL
I MECHA C.B
TAPE SPEED ADJ.
LB9051A
DECK MOTOR
D PT C.B
K REG C.B
CON8 TO CD/TUNER (RDX-01)
SPEAKERS IMP: 5 Ω
L AC SW C.B (EXCEPT E, K)
S101 AC VOLTAGE
H, LH, HD: 110-120V ↔ 220-240V
U: 120V ↔ 220-240V
PT101
F102
E, K ONLY

※

| | H, LH, U, HD | E, K |
|---|---|---|
| C111, 112 | 2.2/50 | 0.47/50 |
| C126 | 6800/35 | 4700/35 |
| R109, 110 | 270 | 470 |
| R137, 138 | 1.5K | 5.6K |
| C125 | 1000/25 SME | 1000/25 KME |

☆

| | F101 | F102 |
|---|---|---|
| H, LH, HD | 7A 12.5V | 1.6A 250V |
| U | 6.3A 12.5V | 1.6A 250V |
| E, K | T6.3A | 80mA T |

*

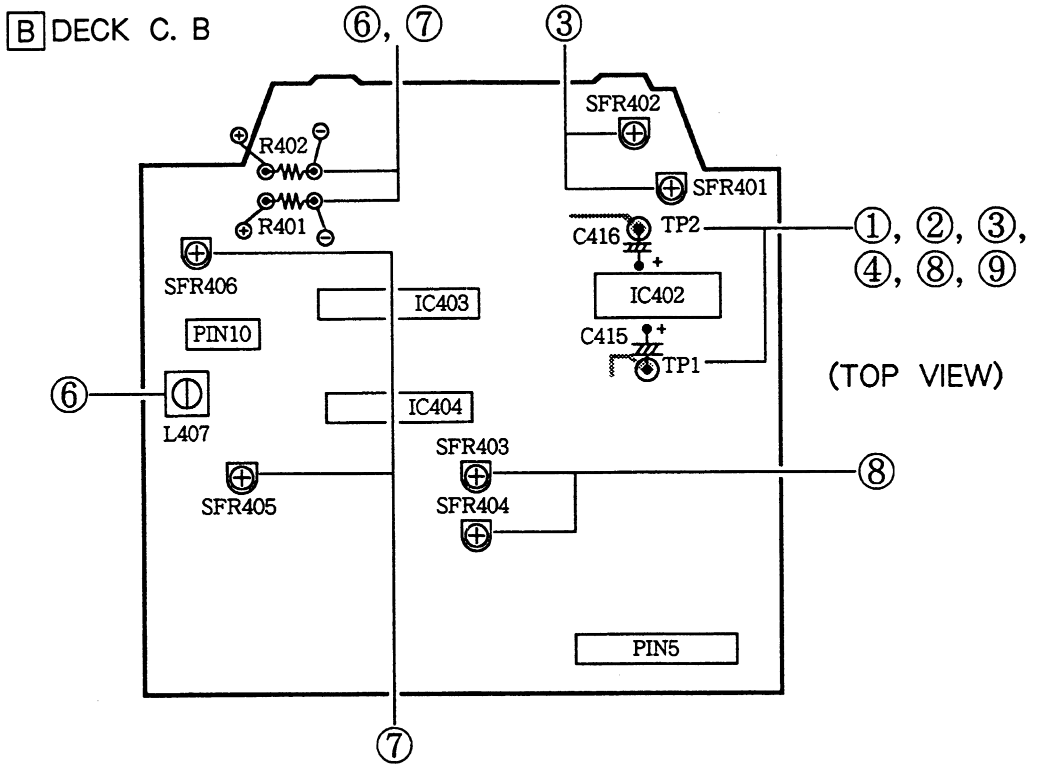
| | Q228 | R206 | R207 |
|---|---|---|---|
| H, LH, U, HD | 2SA952K | 2.2K | 3.3K |
| E, K | 2SA1296GR | 1K | 1.8K |

H, LH, HD: AC110-120V/220-240V 50/60Hz
U: AC120V/220-240V 50/60Hz
E: AC230V 50Hz
K: AC240V 50Hz

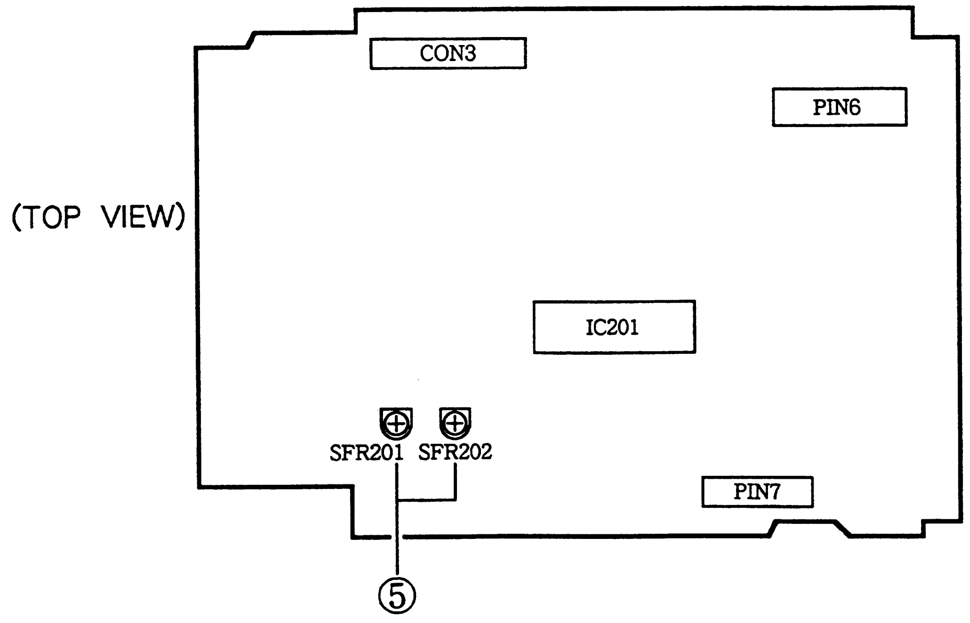
# ADJUSTMENT (FX – 01)

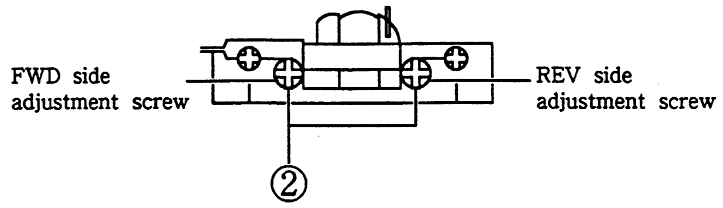
## (DECK SECTION)

B DECK C. B



A MAIN C. B





1. Tape speed Adjustment
   Settings :
   - Test tape : TTA-100 (TTA-111S)
   - Test point : TP1 (L ch)
     TP2 (R ch)
   - Adjustment location :
     SFR in deck motor

   Method : Play back the test tape and adjust for 3000 ± 40Hz.

2. Head Azimuth Adjustment
   Settings :
   - Test tape : TTA-310
     (TTA-317E, SCC-1429)
   - Test point : TP1 (L ch)
     TP2 (R ch)
   - Adjustment location :
     Head azimuth
     adjustment screw

   Method : Play back the 10kHz signal of the test tape and adjust so that the output becomes maximum.
   Next, perform on each FWD PLAY mode and REV PLAY mode.

3. PB sensitivity Adjustment
   Settings :
   - Test tape : TTA-200
     (TCC-130, TTA-161)
   - Test point : TP1 (L ch)
     TP2 (R ch)
   - Adjustment location :
     SFR401 (L ch)
     SFR402 (R ch)

   Method : Play back the test tape and adjust so that the output becomes $300 \pm ^{10}_{0}$ mV.

4. PB Frequency Response Check
   Settings :
   - Test tape : TTA-310
     (TTA-317E, SCC-1429)
   - Test point : TP1 (L ch)
     TP2 (R ch)

   Method : Play back the 315Hz and 10kHz signals of the test tape and check the output of the 10kHz signal is 0 ± 2.5dB with respect to that of the 315Hz signal.

5. LED level Meter Adjustment
   Settings :
   - Test tape : TTA-610 (TTA-119H)
   - Test point : TP1, TP2
   - Adjustment location :
     SFR201 (L ch)
     SFR202 (R ch)

   Method : Apply a 1kHz signal to AUX terminal and adjust the attenuator so that the level at the test point is 300mV. In this condition, adjust the SFR to light on the dolby LED.

6. Bias Frequency Adjustment
   Settings :
   - Test tape : TTA-610 (TTA-119H)
   - Test point : R401 or R402
   - Adjustment location : L407

   Method : Set deck to REC mode and adjust L407 so that frequency is 85 ± 2kHz at the test point.

7. Bias Current Adjustment
   Settings :
   - Test tape : TTA-610 (TTA-119H)
   - Test point : R401 (L ch)
     R402 (R ch)
   - Adjustment location :
     SFR405
     (Level adjustment)
     SFR406
     (Balance adjustment)

   Method :
   1) Set deck to REC mode and adjust SFR406 so that L and R ch bias level are equal.
   2) After balance adjustment, adjust SFR405 so that the bias level is 58 ± 1mV.

8. REC/PB sensitivity Adjustment
   Settings :
   - Test tape : TTA-601 (TTA-119K)
     (For adjustment)
     TTA-610 (TTA-119H)
     (For measurement)
   - Test point : TP1 (L ch)
     TP2 (R ch)
   - Adjustment location :
     SFR403 (L ch)
     SFR404 (R ch)

   Method :
   1) Apply a signal lowered from 775mV (0dB) to -20dB by attenuator to AUX/DAT terminal.
   2) Set the adjustment tape, and record and play back the 400Hz.
   3) Adjust so that difference between record and play back level is within 0 ± 0.5dB.
   4) Exchange the tape for measurement, and record and play back the 400Hz. Check the difference between record and play back level is within 0 ± 1.0dB.

9. REC/PB frequency Response Check

Settings :
- Test tape : TTA-601 (TTA-119K)
  TTA-610 (TTA-119H)
- Test point : TP1 (L ch)
  TP2 (R ch)

Method :
1) Apply a signal lowered from 775mV (0dB) to -20dB by attenuator to AUX/DAT terminal.
2) Record and play back the 1kHz and 10kHz of the test tape.
3) Check each difference between record and play back level is within 0 ± 2.5dB at 1kHz and 10kHz of the test tape.
4) If the difference is over 0 ± 2.5dB, adjust the bias level (step.7) again.

## PRACTICAL SERVICE FIGURE

< TAPE RECORDER SECTION >

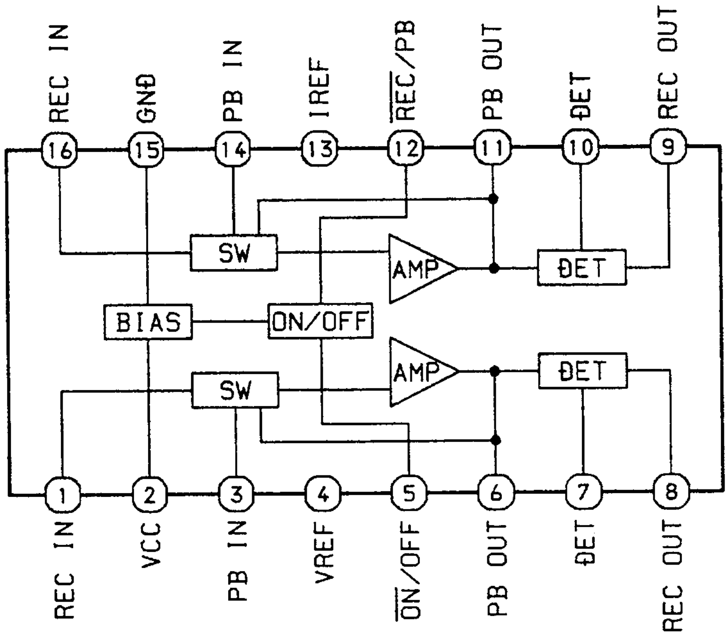
| | |
|---|---|
| Bias frequency : | 85kHz |
| Distortion : | Less than 1.5% (PB, AC)<br>Less than 3.5% (REC/PB, AC) |
| S/N ratio : | H, LH, U, HD :<br>More than 45dB (PB, AC)<br>More than 44dB (REC/PB, AC)<br>E, K :<br>More than 46dB (PB, AC)<br>More than 45dB (REC/PB, AC) |
| Noise : | H, LH, U, HD :<br>Less than 40mV (PB, AC, MAX)<br>Less than 45mV (REC/PB, AC, MAX)<br>E, K :<br>Less than 45mV (PB, AC, MAX)<br>Less than 55mV (REC/PB, AC, MAX) |
| Erasing ratio : | More than 60dB |
| Frequency response : | 125Hz ± 3dB~12.5kHz ± 3.5dB (PB)<br>63Hz ± 4dB~12.5kHz ± 4dB (REC/PB) |
| Tape speed : | 3000Hz ± 90Hz |
| Wow & flutter : | Less than 0.38% (JIS, RMS) |
| Take up torque : | 25~60g-cm (FWD/REVERSE) |
| FF torque : | 75~150g-cm |
| REW torque : | 75~150g-cm |
| Back tension : | 2~6g-cm |
| Test tape : | TTA-601 (TTA-119K)<br>TTA-610 (TTA-119H)<br>TTA-310 (TTA-317E, SCC-1429) |

# IC DESCRIPTION (FX – 01)
## IC, LC6543H – 4882

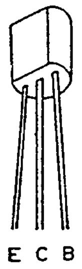
| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | $\overline{\text{O – RVS}}$ | O | "REVERSE" LED indicator control. |
| 2 | VDD | – | Power supply. |
| 3<br>∫<br>6 | $\overline{\text{KD0}}$<br>∫<br>$\overline{\text{KD3}}$ | I | Key matrix input port. |
| 7 | $\overline{\text{KO1}}$ | O | Deck key matrix output port. |
| 8 | $\overline{\text{KO0}}$ | | |
| 9 | $\overline{\text{O – REC}}$ | O | Tape playback or record control signal. |
| 10 | $\overline{\text{O-SYN}}$/I-PWR | I/O | CD synchro-recording when output as "L".<br>Detect "H" to "L" transition input signal to store previous status.<br>Possible only for "REC" with "PAUSE" condition. |
| 11 | $\overline{\text{I – SYNC}}$ | I | CD synchro-recording input control. |
| 12 | $\overline{\text{REMOTE}}$ | I | Remote control input. |
| 13 | $\circlearrowleft/\overline{\supset}$ | – | Not used. |
| 14 | AUTO – S | I | CD synchro-recording input control. |
| 15 | OSC2 | O | 4.19MHz clock oscillation output. |
| 16 | OSC1 | I | 4.19MHz clock oscillation input. |
| 17 | TEST | I | GND. |
| 18 | VSS | – | GND. |
| 19 | $\overline{\text{RESET}}$ | I | Reset signal input ("L" when reset). |
| 20 | $\overline{\text{H – SP}}$ | I | Not used. |
| 21 | $\overline{\text{MOTOR}}$ | O | Tape motor power supply control. |
| 22 | $\overline{\text{SOL – PLAY}}$ | O | Logic – mecha play solenoid control. |
| 23 | $\overline{\text{SOL – FR}}$ | O | Logic – mecha forward/reverse solenoid control. |
| 24 | $\overline{\text{PLAY}}$ | I | Detect tape play signal. |
| 25 | $\overline{\text{FR}}$ | I | Forward/reverse tape control. |
| 26 | $\overline{\text{REC A}}$ | I | Tape side A recording. |
| 27 | $\overline{\text{REC B}}$ | I | Tape side B recording. |
| 28 | $\overline{\text{CST}}$ | I | Detect existance of cassette tape. |
| 29 | $\overline{\text{O – PAUS}}$ | O | "PAUSE" LED indicator control. |
| 30 | $\overline{\text{O – FWD}}$ | O | "FORWARD" LED indicator control. |

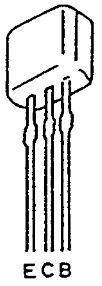
## IC BLOCK DIAGRAM (FX – 01)

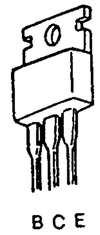
IC,HA12134A

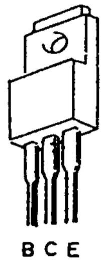

REC IN
GND
PB IN
IREF
$\overline{\text{REC}}$/PB
PB OUT
DET
REC OUT
16
15
14
13
12
11
10
9
SW
AMP
DET
BIAS
ON/OFF
AMP
DET
SW
1
2
3
4
5
6
7
8
REC IN
VCC
PB IN
VREF
$\overline{\text{ON}}$/OFF
PB OUT
DET
REC OUT

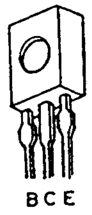
## TRANSISTOR ILLUSTRATION (FX – 01)







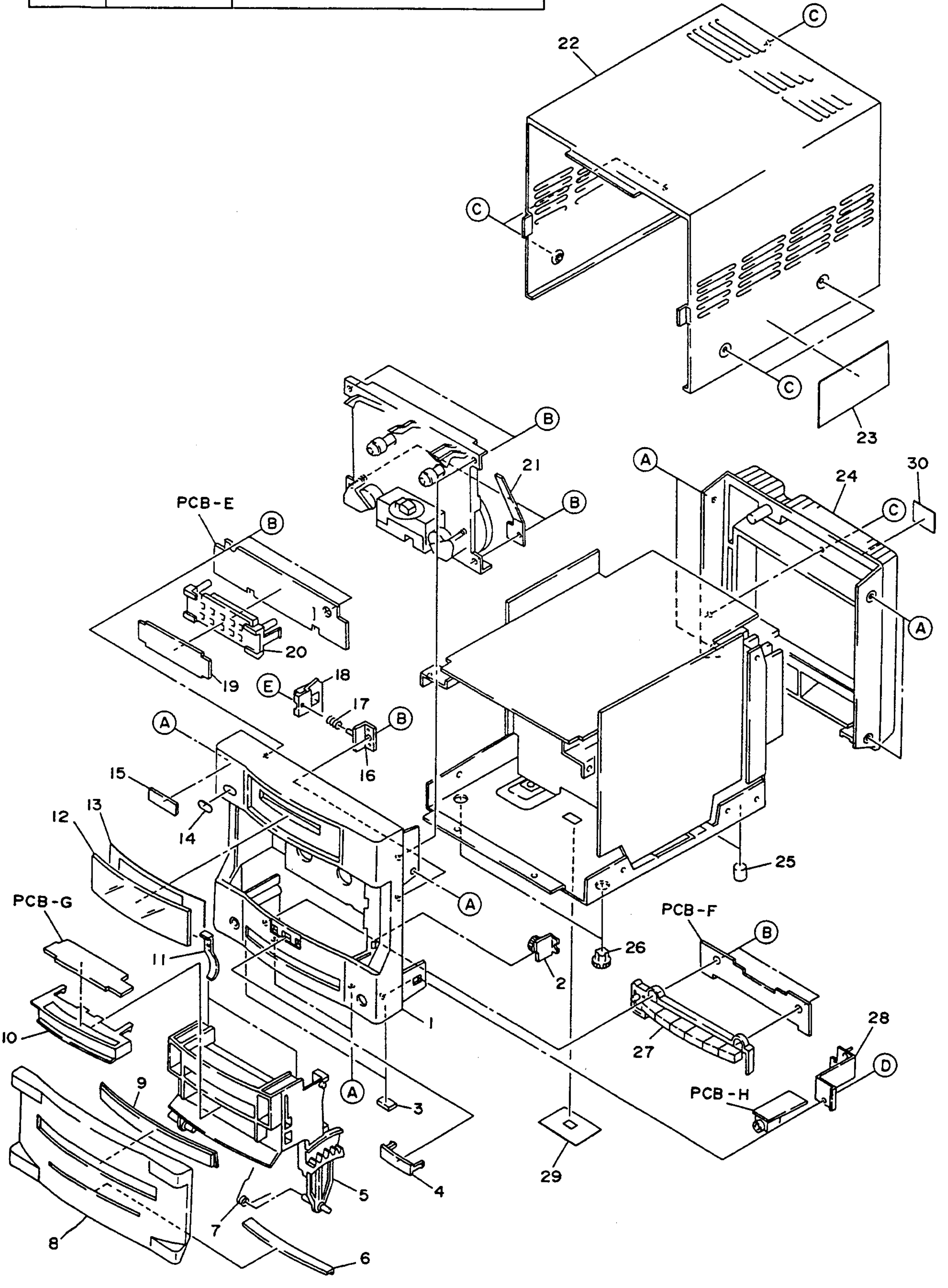




| | | | | |
|---|---|---|---|---|
| 2SA1296 | 2SA933 | 2SB1289 | 2SB1292 | 2SD2005 |
| 2SA952 | 2SC1740 | | 2SD2061 | |
| 2SC2001 | DTA124 | | | |
| 2SC3331 | DTC114 | | | |
| | DTC124 | | | |
| | DTC144 | | | |

# EXPLODED VIEW – 1 (FX – 01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 87-591-094-410 | QIT + 3 – 6 |
| B | 87-067-579-010 | BVT2 + 3 – 8 W/O SLOT |
| C | 87-067-641-010 | UTT2 + 3 – 8 W/O SLOT (B) |
| D | 87-067-758-010 | BVT2 + 3 – 12 W/O SLOT |
| E | 87-081-808-010 | PW1.7 – 3.5 – 0.25 |



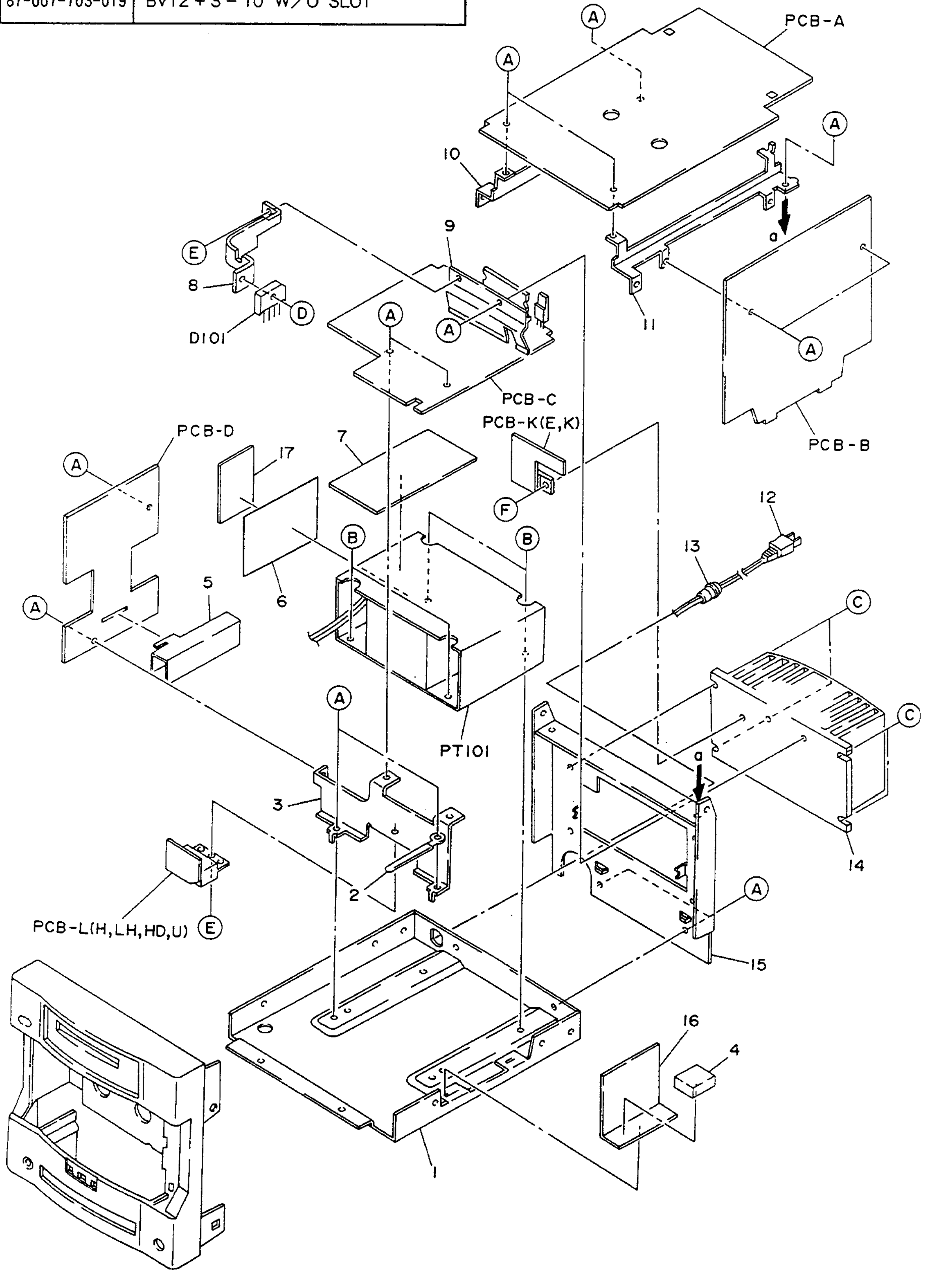
C
22
C
C
23
B
21
B
A
24
C
30
A
PCB-E
B
20
19
E
18
17
B
16
A
15
13
12
14
A
25
PCB-G
11
PCB-F
B
26
2
10
1
27
28
D
A
9
3
PCB-H
29
5
4
7
8
6

# MECHANICAL PARTS LIST (FX – 01)

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 1-1 | ★81-NWB-001-019 | CABINET, FRONT (EXCEPT U) | ※ | 1 |
| | 1-1 | ★81-NWB-016-019 | CABINET, FRONT (U) | ※ | 1 |
| | 1-2 | ★87-064-167-019 | DAMPER, OIL 150 | | 1 |
| | 1-3 | ★81-NWB-027-019 | FOOT, FRONT | ※ | 2 |
| | 1-4 | ★81-NWB-011-019 | CAP, AZIMUTH | ※ | 1 |
| | 1-5 | ★81-NWB-005-019 | BOX, CASSETTE | ※ | 1 |
| | 1-6 | ★81-NWB-008-019 | LENS, CASSETTE | ※ | 1 |
| | 1-7 | ★81-NWB-208-019 | T – SPRING, CASSETTE | ※ | 1 |
| | 1-8 | ★81-NWB-004-019 | LID, CASSETTE | ※ | 1 |
| | 1-9 | ★81-NWB-007-019 | WINDOW, CASSETTE | ※ | 1 |
| | 1-10 | ★81-NWB-207-019 | REFRECTOR, CASSETTE | ※ | 1 |
| | 1-11 | ★81-CD2-230-019 | P – SPRING, CASSETTE | | 2 |
| | 1-12 | ★81-NWB-010-019 | WINDOW, DISPLAY | ※ | 1 |
| | 1-13 | ★81-NKB-213-019 | ADHESHIVE SHEET, WINDOW | | 1 |
| | 1-14 | ★81-NWB-009-019 | WINDOW, REMOTE | ※ | 1 |
| | 1-15 | ★81-MX4-032-019 | BADGE, AIWA | | 1 |
| | 1-16 | ★80-CD3-219-010 | LOCK HOLDER ASSY | | 1 |
| | 1-17 | ★81-715-234-010 | C – SPRING, LOCK PLATE | | 1 |
| | 1-18 | ★80-CD3-233-010 | PLATE, LOCK | | 1 |
| | 1-19 | ★81-NWB-012-119 | PLATE, LED | ※ | 1 |
| | 1-20 | --- | HOLDER, LED | | 1 |
| | 1-21 | ★81-NWB-214-019 | P – SPRING, BOX | ※ | 1 |
| | 1-22 | ★81-NWB-003-019 | CABINET, STEEL | ※ | 1 |
| | 1-23 | ★81-NWB-023-019 | LABEL, SPEC (H) | ※ | 1 |
| | 1-23 | ★81-NWB-025-019 | LABEL, SPEC (LH) | ※ | 1 |
| | 1-23 | ★81-NWB-026-019 | LABEL, SPEC (HD) | ※ | 1 |
| | 1-23 | ★81-NWB-021-019 | LABEL, SPEC (U) | ※ | 1 |
| | 1-23 | ★81-NWB-042-019 | LABEL, SPEC (E) | ※ | 1 |
| | 1-23 | ★81-NWB-022-019 | LABEL, SPEC (EE) | ※ | 1 |
| | 1-23 | ★81-NWB-024-019 | LABEL, SPEC (K) | ※ | 1 |
| | 1-24 | ★81-NWB-002-019 | CABINET, REAR (EXCEPT U) | ※ | 1 |
| | 1-24 | ★81-NWB-017-019 | CABINET, REAR (U) | ※ | 1 |
| | 1-25 | ★81-NKB-018-019 | FOOT | | 2 |
| | 1-26 | ★81-NKB-019-019 | BUSHING, STAND | | 2 |
| | 1-27 | ★81-NWB-006-019 | KEY, CASSETTE | ※ | 1 |
| | 1-28 | --- | HOLDER, MECHANISM | | 1 |
| | 1-29 | ★81-NWB-040-019 | LABEL, AC SWITCH (H, LH) | ※ | 1 |
| | 1-29 | ★81-NWB-041-019 | LABEL, AC SWITCH (HD) | ※ | 1 |
| | 1-29 | ★81-NWB-039-019 | LABEL, AC SWITCH (U) | ※ | 1 |
| | 1-30 | ★81-NWB-019-019 | PLATE, CN (U) | ※ | 1 |

# EXPLODED VIEW - 2 (FX - 01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 87-067-584-010 | BVT2 + 3 - 6 W/O SLOT |
| B | 87-067-585-010 | BVTT + 4 - 6 |
| C | 87-067-761-010 | BVT2 + 3 - 10 (B) |
| D | 87-067-758-010 | BVT2 + 3 - 12 W/O SLOT |
| E | 87-067-579-010 | BVT2 + 3 - 8 W/O SLOT |
| F | 87-067-703-019 | BVT2 + 3 - 10 W/O SLOT |



PCB-A
A
10
9
11
a
E
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D
D101
PCB-C
PCB-B
PCB-D
17
7
PCB-K(E,K)
F
12
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B
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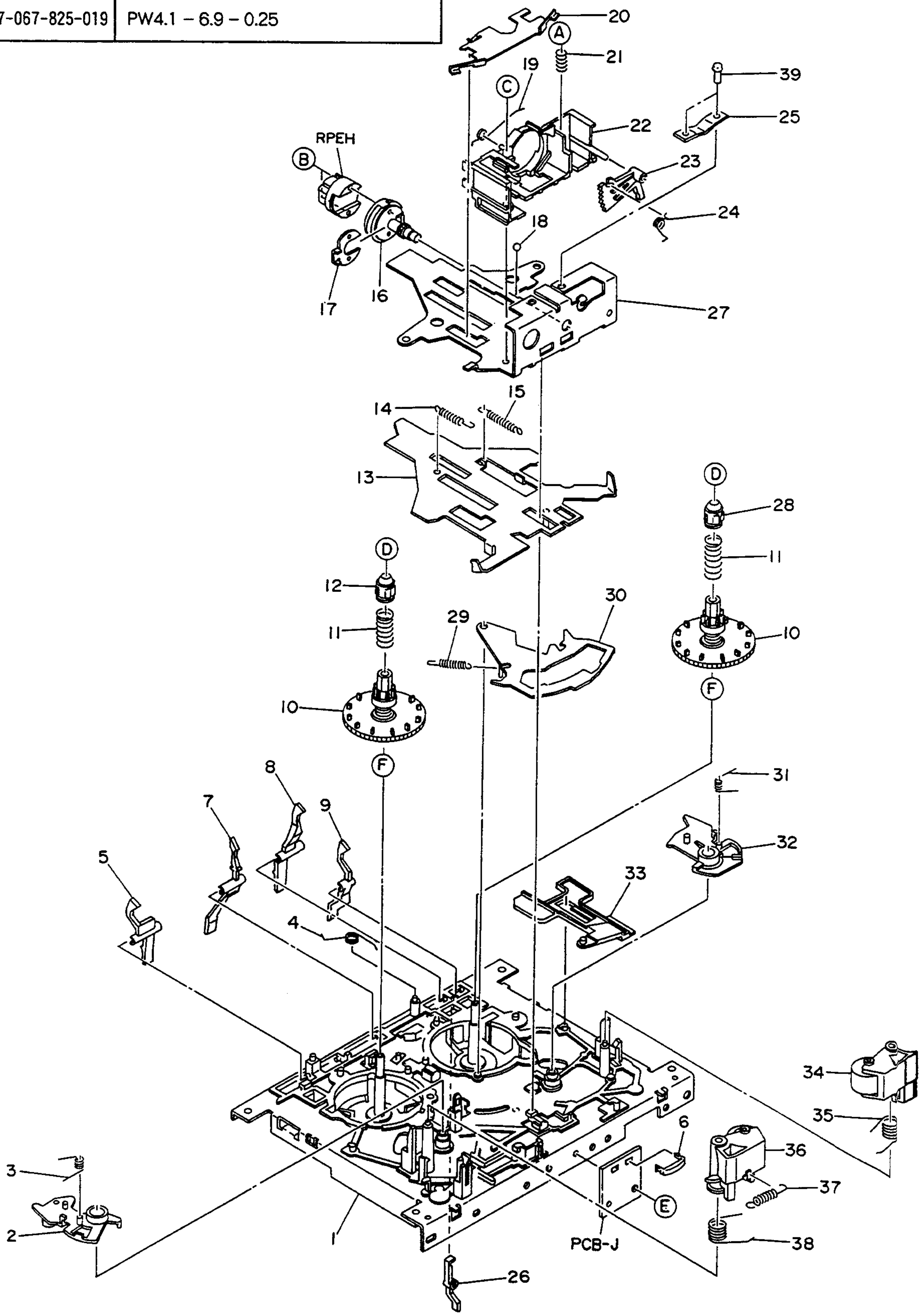
6
PT101
C
3
2
PCB-L(H,LH,HD,U)
E
14
15
16
4
1

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 2-1 | --- | CHASSIS, MAIN | | 1 |
| | 2-2 | --- | BINDER, WIRE | | 1 |
| | 2-3 | --- | HOLDER, AC SWITCH | | 1 |
| | 2-4 | --- | CUSHION, S 15 - 20 - 10 | | 1 |
| | 2-5 | ★81-NWB-215-019 | COVER, PWB | ※ | 1 |
| | 2-6 | ★81-NWB-637-019 | SHEET, PT 76 - 43 (E, K) | ※ | 1 |
| | 2-7 | ★81-NWB-799-019 | SHIELD PLATE, PA | ※ | 1 |
| | 2-8 | --- | HEAT SINK | | 1 |
| | 2-9 | ★81-NWB-211-119 | P - SPRING, IC | ※ | 1 |
| | 2-10 | --- | HOLDER, SIDE L | | 1 |
| | 2-11 | --- | HOLDER, SIDE R | | 1 |
| | 2-12 | ★87-034-761-010 | CORD, AC (H, LH, HD) | | 1 |
| | 2-12 | ★87-034-584-019 | CORD, AC (U) | | 1 |
| | 2-12 | ★82-187-797-019 | CORD, AC (E) | | 1 |
| | 2-12 | ★82-187-796-019 | CORD, AC (K) | | 1 |
| | 2-13 | ★87-085-184-010 | BUSHING, AC CORD (H, LH, HD) | | 1 |
| | 2-13 | ★87-085-189-010 | BUSHING, AC CORD (U) | | 1 |
| | 2-13 | ★87-085-185-010 | BUSHING, AC CORD (E, K) | | 1 |
| | 2-14 | --- | HEAT SINK | | 1 |
| | 2-15 | --- | CHASSIS, REAR | | 1 |
| | 2-16 | ★81-NWB-626-019 | SHIELD PLATE, DECK | ※ | 1 |
| | 2-17 | ★81-NWB-640-019 | SHEET, FIBER 35 - 43 | ※ | 1 |

# EXPLODED VIEW − 3 (FX − 01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 86-575-363-210 | S − SCREW V + 2 − 8 |
| B | 80-ZM6-207-019 | V + 1.6 − 7 |
| C | 87-261-033-419 | V + 2 − 4 |
| D | 86-524-418-019 | VFT2 + 1.4 − 5 |
| E | 87-067-174-019 | VTT + 2 − 4 |
| F | 87-067-825-019 | PW4.1 − 6.9 − 0.25 |


20
Ⓐ
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Ⓒ
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RPEH
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15
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32
5
33
4
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6
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PCB-J
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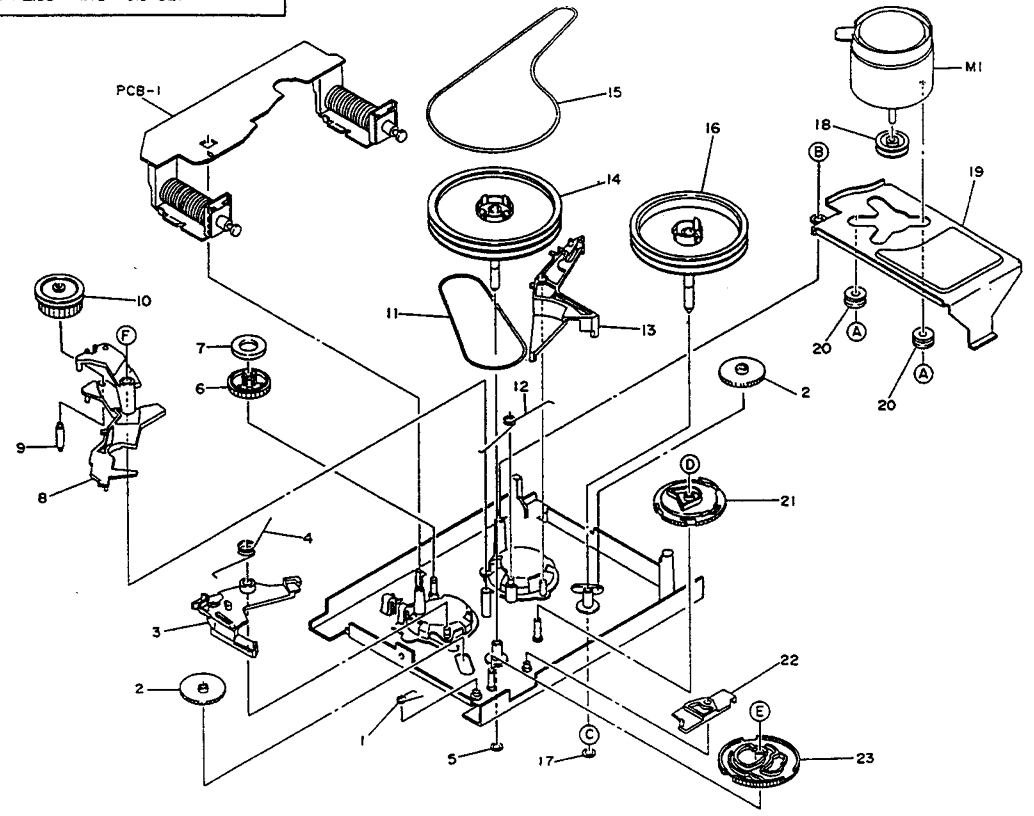
26

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 3-1 | ★80-ZM6-201-810 | MECHANISM CHASSIS ASSY | | 1 |
| | 3-2 | ★86-535-239-110 | LEVER, PLAY R | | 1 |
| | 3-3 | ★86-535-283-019 | T - SPRING, PLAY GEAR R | | 1 |
| | 3-4 | ★80-ZM6-206-019 | T - SPRING, CASSETTE | | 1 |
| | 3-5 | ★86-575-322-110 | LEVER, REC A | ※ | 1 |
| | 3-6 | ★86-575-342-010 | HOLDER, WIRE 2 | ※ | 1 |
| | 3-7 | ★86-575-324-310 | LEVER, CASSETTE | ※ | 1 |
| | 3-8 | ★86-575-327-210 | LEVER, CHROME | ※ | 1 |
| | 3-9 | ★86-575-323-010 | LEVER, REC B | ※ | 1 |
| | 3-10 | ★80-ZM6-254-110 | REEL GEAR ASSY L | | 2 |
| | 3-11 | ★86-535-293-019 | C - SPRING, REEL TABLE | | 2 |
| | 3-12 | ★86-524-218-319 | STOPPER, REEL TABLE S | | 1 |
| | 3-13 | ★86-535-215-410 | SLIDE PLATE ASSY | | 1 |
| | 3-14 | ★80-ZM6-268-019 | E - SPRING, SLIDE 3 | | 1 |
| | 3-15 | ★86-575-226-019 | E - SPRING, HEAD CHASSIS | ※ | 1 |
| | 3-16 | ★86-575-306-910 | HOLDER, HOUSING | ※ | 1 |
| | 3-17 | ★86-575-305-010 | PLATE, HOUSING | ※ | 1 |
| | 3-18 | ★87-073-018-010 | BALL, STEEL 1.588 | | 1 |
| | 3-19 | ★86-575-310-219 | T - SPRING, HEAD | ※ | 1 |
| | 3-20 | ★86-575-347-110 | P - SPRING, HEAD 2 | ※ | 1 |
| | 3-21 | ★86-541-318-119 | C - SPRING, AZIMUTH | | 1 |
| | 3-22 | ★86-575-288-510 | GUIDE, TAPE | ※ | 1 |
| | 3-23 | ★86-575-290-310 | GEAR, SEGMENT | ※ | 1 |
| | 3-24 | ★80-ZM6-229-110 | T - SPRING, SEGMENT GEAR 2 | | 2 |
| | 3-25 | ★86-575-343-110 | P - SPRING, AZIMUTH 2 | ※ | 1 |
| | 3-26 | ★86-575-326-310 | LEVER, RINK | ※ | 1 |
| | 3-27 | ★86-575-311-410 | CHASSIS, HEAD | ※ | 1 |
| | 3-28 | ★86-524-233-219 | STOPPER, REEL TABLE T | | 1 |
| | 3-29 | ★86-535-284-119 | E - SPRING, DIRECTION LEVER | | 1 |
| | 3-30 | ★86-535-218-310 | DIRECTION LEVER ASSY | | 1 |
| | 3-31 | ★86-535-282-019 | T - SPRING, PLAY GEAR F | | 1 |
| | 3-32 | ★86-535-238-310 | LEVER, PLAY F | | 1 |
| | 3-33 | ★86-575-345-210 | LEVER, SWITCH 2 | ※ | 1 |
| | 3-34 | 86-535-226-310 | PINCH LEVER ASSY F | | 1 |
| | 3-35 | ★86-575-222-110 | T - SPRING, PINCH F | ※ | 1 |
| | 3-36 | 86-535-228-410 | PINCH LEVER ASSY R | | 1 |
| | 3-37 | ★86-575-339-019 | E - SPRING, PINCH 22 | ※ | 1 |
| | 3-38 | ★86-575-341-110 | T - SPRING, PINCH L | ※ | 1 |
| | 3-39 | ★80-ZM6-251-019 | S - SCREW, AZIMUTH 2 | | 2 |

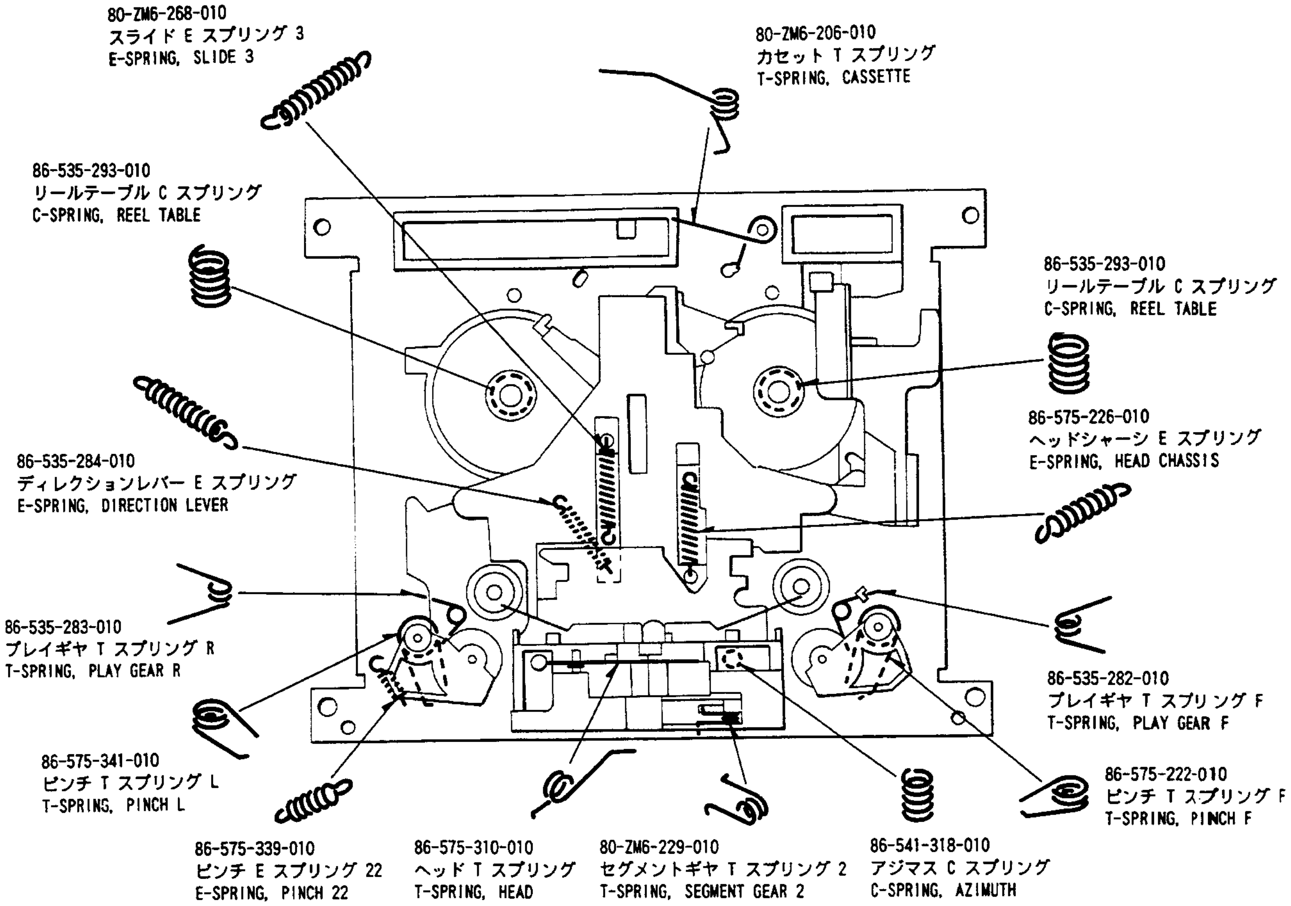
# EXPLODED VIEW – 4 (FX – 01)

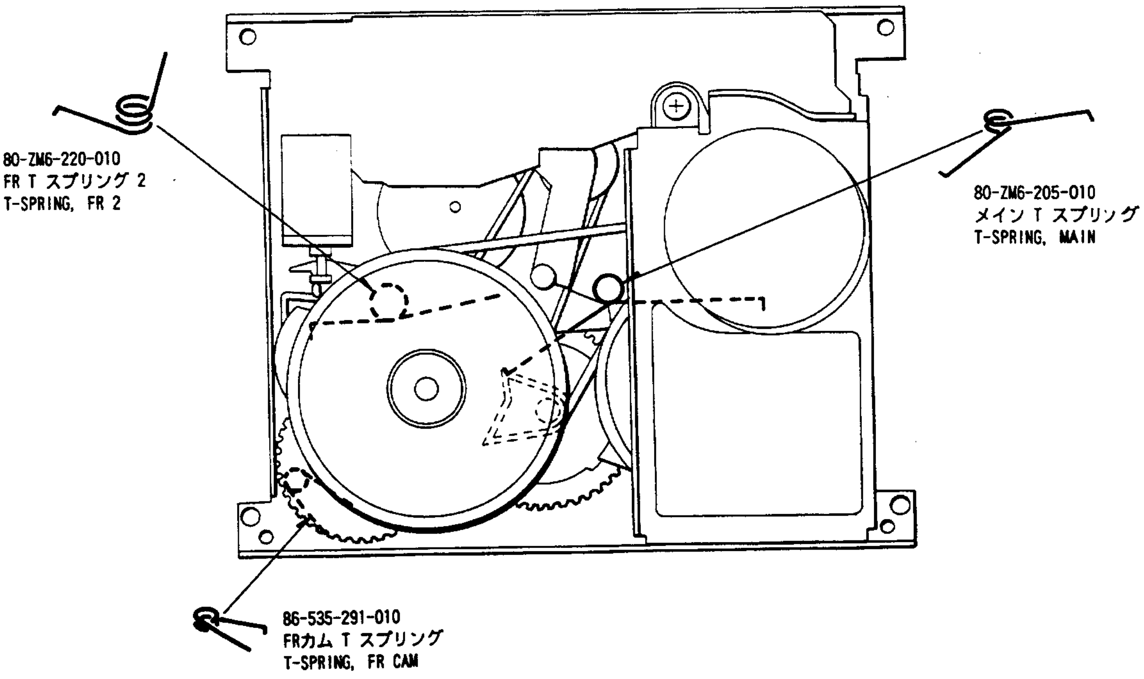
| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 86-524-457-019 | U + 2.6 – 5.5 |
| B | 87-741-073-419 | UT2 + 2.6 – 6 |
| C | 86-575-355-010 | PW3.2 – 2.3 – 0.1 |
| D | 87-081-489-019 | PW1.7 – 3.5 – 0.25 SLT |
| E | 87-067-380-019 | PW1.7 – 7 – 0.5 |
| F | 80-ZM6-211-019 | PW2.68 – 4.15 – 0.3 SLT |



| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 4-1 | ★86-535-291-210 | T – SPRING, FR CAM | | 1 |
| | 4-2 | ★86-575-221-310 | GEAR, PLAY | ※ | 2 |
| | 4-3 | ★86-535-230-510 | LEVER, TRIGGER FR | | 1 |
| | 4-4 | ★80-ZM6-220-019 | T – SPRING, FR 2 | | 1 |
| | 4-5 | ★80-ZM6-242-019 | SHEET, 1.95 – 3.6 – 0.5 | | 1 |
| | 4-6 | ★86-575-328-110 | GEAR, IDLER | ※ | 1 |
| | 4-7 | ★80-ZM6-217-010 | MAGNET, RING 2 | | 1 |
| | 4-8 | ★80-ZM6-218-110 | LEVER, FR 2 | | 1 |
| | 4-9 | ★80-ZM6-222-110 | SHAFT, FR PULLEY | | 1 |
| | 4-10 | ★80-ZM6-272-010 | GEAR, FR 2 | | 1 |
| | 4-11 | 80-ZM6-227-110 | BELT, SQ1.2 – 140 | | 1 |
| | 4-12 | ★80-ZM6-205-110 | T – SPRING, MAIN | | 1 |
| | 4-13 | ★86-535-231-510 | LEVER, TRIGGER PLAY | | 1 |
| | 4-14 | 80-ZM6-262-110 | FLYWHEEL ASSY R2 | | 1 |
| | 4-15 | ★86-575-381-010 | BELT, SQ1.3 – 210 | ※ | 1 |
| | 4-16 | 80-ZM6-208-310 | FLYWHEEL ASSY L1 | | 1 |
| | 4-17 | ★80-ZM6-243-019 | SHEET, 1.75 – 3.6 – 0.5 | | 1 |
| | 4-18 | ★86-575-366-010 | PULLEY, MOTOR 24 | ※ | 1 |
| | 4-19 | ★86-575-301-410 | HOLDER, MOTOR | ※ | 1 |
| | 4-20 | ★86-513-441-210 | COLLAR, MOTOR | | 2 |
| | 4-21 | ★86-575-312-210 | CAM, MAIN | ※ | 1 |
| | 4-22 | ★86-575-229-210 | LEVER, PAUSE B | ※ | 1 |
| | 4-23 | ★80-ZM6-219-210 | CAM, FR MK2 2M | | 1 |

# SPRING APPLICATION POSITION (FX－01)


80-ZM6-268-010
スライド E スプリング 3
E-SPRING, SLIDE 3
80-ZM6-206-010
カセット T スプリング
T-SPRING, CASSETTE
86-535-293-010
リールテーブル C スプリング
C-SPRING, REEL TABLE
86-535-293-010
リールテーブル C スプリング
C-SPRING, REEL TABLE
86-575-226-010
ヘッドシャーシ E スプリング
E-SPRING, HEAD CHASSIS
86-535-284-010
ディレクションレバー E スプリング
E-SPRING, DIRECTION LEVER
86-535-283-010
プレイギヤ T スプリング R
T-SPRING, PLAY GEAR R
86-535-282-010
プレイギヤ T スプリング F
T-SPRING, PLAY GEAR F
86-575-341-010
ピンチ T スプリング L
T-SPRING, PINCH L
86-575-222-010
ピンチ T スプリング F
T-SPRING, PINCH F
86-575-339-010
ピンチ E スプリング 22
E-SPRING, PINCH 22
86-575-310-010
ヘッド T スプリング
T-SPRING, HEAD
80-ZM6-229-010
セグメントギヤ T スプリング 2
T-SPRING, SEGMENT GEAR 2
86-541-318-010
アジマス C スプリング
C-SPRING, AZIMUTH


80-ZM6-220-010
FR T スプリング 2
T-SPRING, FR 2
80-ZM6-205-010
メイン T スプリング
T-SPRING, MAIN
86-535-291-010
FRカム T スプリング
T-SPRING, FR CAM

## MODEL No.
# RDX – 01

## DISASSEMBLY INSTRUCTIONS (RDX – 01)

**1. "Cabinet, Steel" Removal** (See Figure – 1)

1) Remove the 5 screws (Ⓐ) and remove the "Cabinet, Steel".

**2. "Chassis, Main"("Board, CD") Removal** (See Figure – 1)

1) Remove the 4 screws (Ⓒ). Then disengage the 2 hooks and remove the "Chassis, Main" in the direction of arrow ①.

**3. "Cabinet, Front" Removal** (See Figure – 1)

1) Insert the "Flat-head screwdriver" into the bottom of the unit as shown in Figure – 1 – 1, and turn the cam in the direction of arrow② to move the "Tray" out. (See Figure – 1 – 1)
2) Remove "Panel, CD" in the direction of arrow ③.
3) Remove the screw (Ⓓ) and 3 connectors (CONN7, CONN9, CONN10). Then disengage the 4 hooks of "Cabinet, Front" and remove "Cabinet, Front".

**4. "Cabinet, Rear" Removal** (See Figure – 1)

1) Remove the screw (Ⓑ) and 2 connectors (CON1, CON2), and remove "Cabinet, Rear".

**5. "Board, Tuner" Removal** (See Figure – 1)

1) Remove the 4 screws (Ⓔ) and remove "Board, Tuner".

**6. "Board, Main" Removal** (See Figure – 1)

1) Remove the 4 screws (Ⓕ) and 2 connectors (CON3, CON4), and remove the "Board, Main".

Flow chart

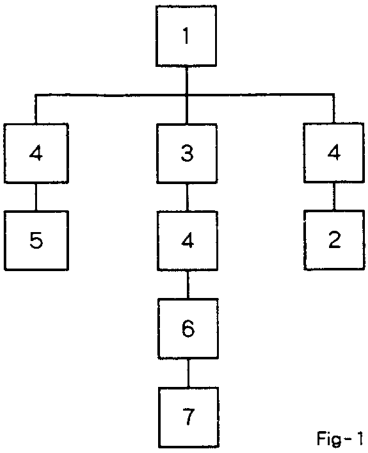


Fig-1-1

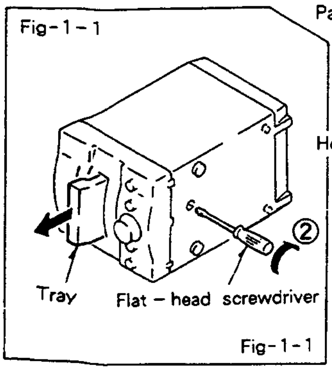

Tray
Flat – head screwdriver
②

Fig-1-1

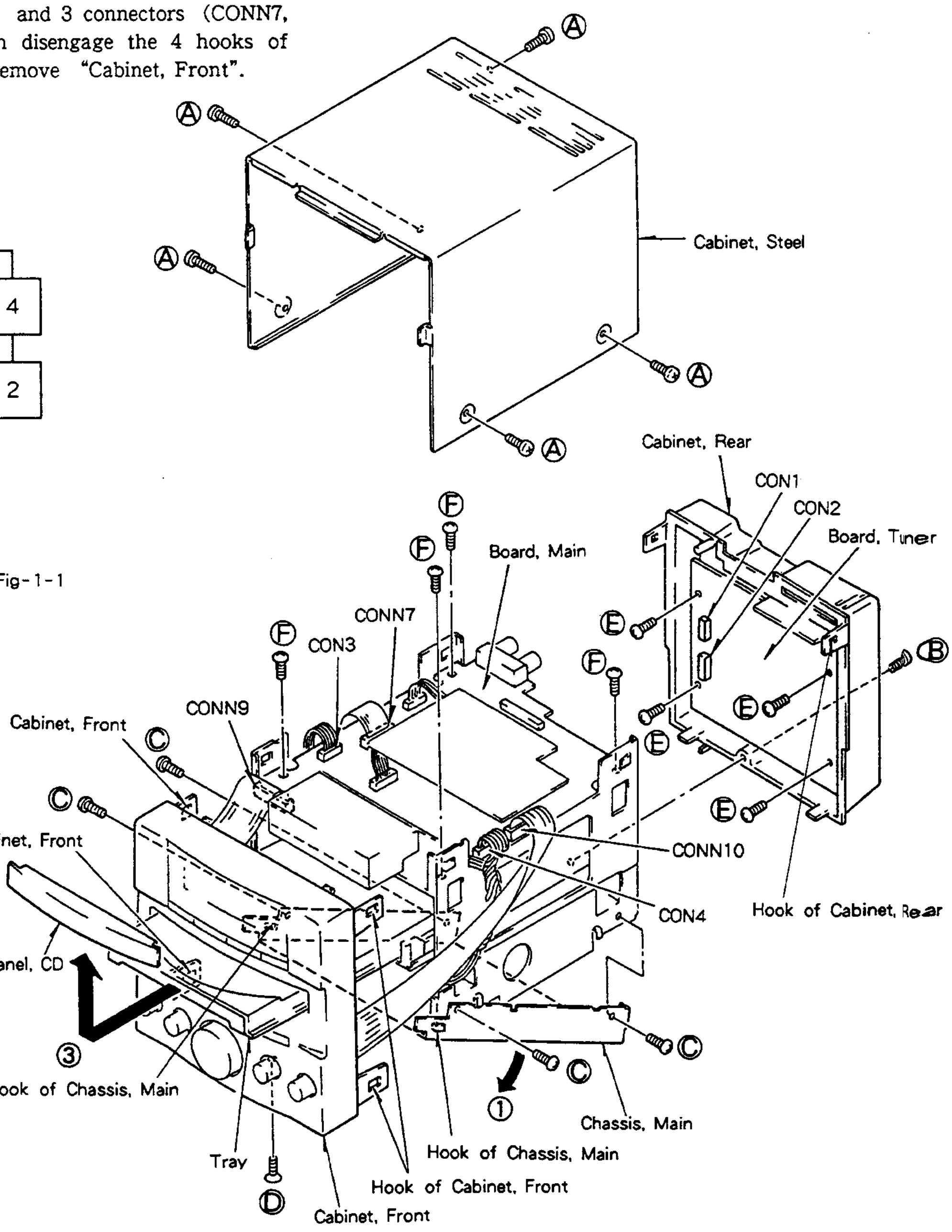

Ⓐ
Ⓐ
Ⓐ
Ⓐ
Ⓐ
Cabinet, Steel
Cabinet, Rear
CON1
CON2
Board, Tuner
Ⓑ
Ⓕ
Ⓕ
Board, Main
CONN7
Ⓕ
CON3
Ⓔ
Ⓕ
Ⓔ
Ⓔ
Ⓔ
CONN9
Hook of Cabinet, Front
Ⓒ
Ⓒ
Hook of Cabinet, Front
CONN10
CON4
Hook of Cabinet, Rear
Panel, CD
③
Hook of Chassis, Main
Ⓒ
Ⓒ
①
Chassis, Main
Hook of Chassis, Main
Tray
Hook of Cabinet, Front
Ⓓ
Cabinet, Front

Fig- 1

7. **"Chassis, CD Mechanism" Removal** (See Figure – 2)

1) Remove the 4 screws (Ⓐ), the pick – up connectors (PIN1, PIN2) and the connector (CON3). Then remove "Chassis, CD Mechanism".

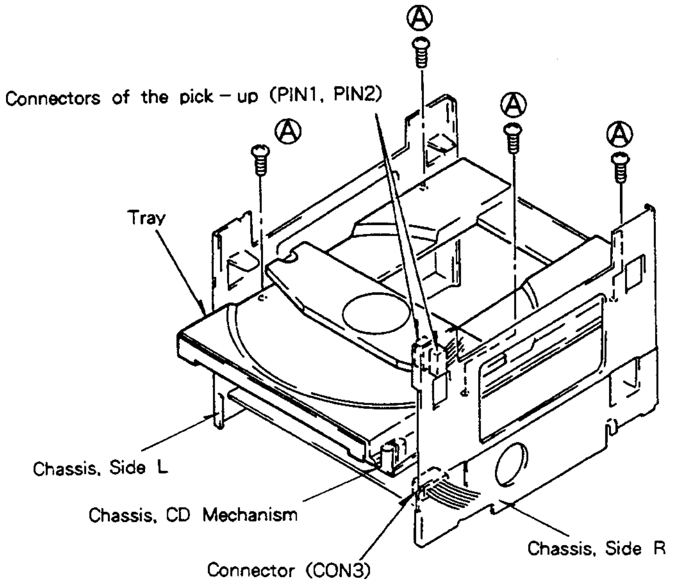

Ⓐ
Connectors of the pick – up (PIN1, PIN2)
Ⓐ
Ⓐ
Ⓐ
Tray
Chassis, Side L
Chassis, CD Mechanism
Connector (CON3)
Chassis, Side R

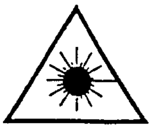
Fig – 2

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

**WARNING!!**

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion.
  Undgå udsættelse for stråling.

**VAROITUS!**

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

**VARNING!**

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

**CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

**ATTENTION**

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1
LASER PRODUCT

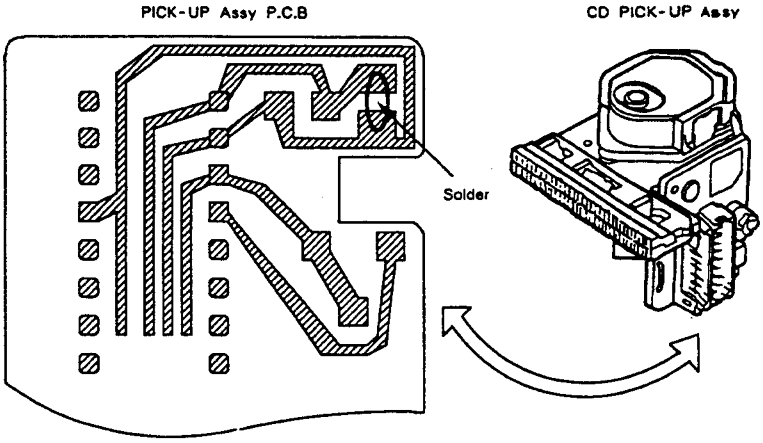
LUOKAN 1
LASERLAITE

KLASS 1
LASER APPARAT

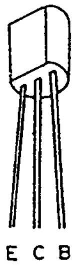
## Precaution to replace Optical block (KSS – 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure to ground body and workbench, and make sure the clothes do not touch the diode.

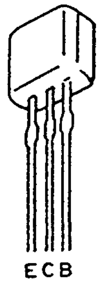
1) After the connection, remove the solder shown in the right figure.



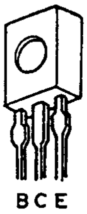
# TRANSISTOR ILLUSTRATION (RDX - 01)



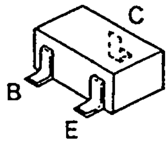
2SA1296
2SA952
2SC2001
2SC3331



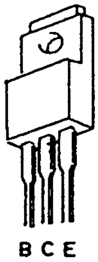
2SA933
2SC1740
DTA124
DTA144
DTC124ES
DTC124XS
DTC144



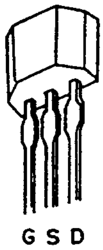
2SB1329
2SD2005



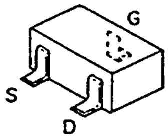
2SC2712
2SC2714
2SC3326
DTA114
DTA143
DTC114
DTC124XK
DTC143
DTC144TK



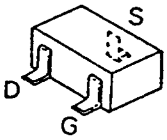
2SD2061



2SK161



2SK209



2SK211

# ELECTRICAL MAIN PARTS LIST (RDX－01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| ===IC=== | | |
| | 87-002-258-010 | IC, AN8377N |
| | 87-001-440-019 | IC, BA15218N |
| | 87-002-427-019 | IC, BA6209N |
| | 87-002-821-010 | IC, BU3559CS |
| | 87-002-247-019 | IC, BU4052B |
| | ⚠87-001-196-019 | IC, ICP-N10 T104 |
| | 87-002-268-019 | IC, LA1851N |
| | 87-001-927-019 | IC, LC7218M |
| | 87-001-176-010 | IC, TA8102P |
| | 87-002-642-010 | IC, TA8124F |
| | 87-002-264-019 | IC, TA8176F |
| | 87-002-407-010 | IC, TA8191F |
| | 87-002-803-010 | IC, TC9236AF |
| | 87-002-644-010 | IC, TDA1311T |
| | 81-NKB-603-010 | IC, TMP47C820F-N837 |
| | 87-002-218-010 | IC, XRC5451AP |
| ===TRANSISTOR=== | | |
| | 89-501-614-019 | FET, 2SK161Y |
| | 89-502-094-019 | FET, 2SK209Y |
| | 89-502-114-019 | FET, 2SK211Y |
| | 89-112-965-019 | TRANSISTOR, 2SA1296GR |
| | 87-026-463-019 | TRANSISTOR, 2SA933S(RS) |
| | 89-109-521-019 | TRANSISTOR, 2SA952K |
| | 89-213-293-019 | TRANSISTOR, 2SB1329R(T105) |
| | 87-026-462-019 | TRANSISTOR, 2SC1740S(RS) |
| | 89-320-011-019 | TRANSISTOR, 2SC2001K |
| | 89-327-124-019 | TRANSISTOR, 2SC2712Y |
| | 89-327-143-019 | TRANSISTOR, 2SC2714(O) |
| | 89-333-266-019 | TRANSISTOR, 2SC3326B |
| | 89-333-317-019 | TRANSISTOR, 2SC3331TU |
| | 89-420-053-019 | TRANSISTOR, 2SD2005R |
| | 89-420-611-019 | TRANSISTOR, 2SD2061E F |
| | 87-026-230-019 | TRANSISTOR, DTA114YK |
| | 87-026-290-019 | TRANSISTOR, DTA124XS |
| | 87-026-226-019 | TRANSISTOR, DTA143EK |
| | 87-026-229-019 | TRANSISTOR, DTA143XK |
| | 87-026-211-019 | TRANSISTOR, DTA144EK |
| | 87-026-219-019 | TRANSISTOR, DTA144ES |
| | 87-026-486-019 | TRANSISTOR, DTA144TS |
| | 87-026-213-019 | TRANSISTOR, DTC114YK(T147) |
| | 87-026-217-019 | TRANSISTOR, DTC124ES |
| | 87-026-237-019 | TRANSISTOR, DTC124XK |
| | 87-026-291-019 | TRANSISTOR, DTC124XS |
| | 87-026-234-019 | TRANSISTOR, DTC143EK |
| | 87-026-218-019 | TRANSISTOR, DTC144ES |
| | 87-026-502-019 | TRANSISTOR, DTC144TS |
| | 87-026-295-019 | TRANSISTOR, DTC144TK |
| ===DIODE=== | | |
| | 87-001-783-019 | DIODE, 1N4002 T |
| | 87-020-465-019 | DIODE, 1SS133 T-72 |
| | 87-020-605-019 | DIODE, 1SS135 |
| | 87-020-125-019 | DIODE, CHIP 1SS181 |
| | 87-020-027-019 | DIODE, CHIP 1SS184 |
| | 87-001-863-019 | DIODE, RB721Q T-72 |
| | 87-027-346-019 | DIODE, ZENER HZ11A2L |
| | 87-027-680-019 | DIODE, ZENER HZ11C1L |
| | 87-027-364-019 | DIODE, ZENER HZ12A3L |
| | 87-027-393-019 | DIODE, ZENER HZ4C2 |
| | 87-027-555-019 | DIODE, ZENER HZ5C2 |
| | 87-027-332-019 | DIODE, ZENER HZ6B1L |
| | 87-027-702-019 | DIODE, ZENER HZ6C2L |
| | 87-027-584-019 | DIODE, ZENER HZ9C1L |
| | 87-001-732-019 | DIODE, ZENER HZS4ALL |
| | 87-027-405-019 | DIODE, ZENER RD2. 2EB |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| ===TUNER CIRCUIT BOARD SECTION=== | | |
| BPF1 | ★87-030-254-019 | FILTER, BPMB6AT(H, LH, U, E, K) |
| C2 | ★87-010-152-010 | CAP, CHIP S 8P-50 CH(HD) |
| C3 | ★87-015-819-019 | CAP, CHIP 0.01(H, LH, U, E, K) |
| C3 | ★87-010-151-010 | CAP, CHIP S 7P-50 CH(HD) |
| C4 | ★87-010-178-019 | CAP, CHIP S 1000P-50 B (H, LH, U, E, K) |
| C5 | ★87-010-151-019 | CAP, CHIP S 7P-50 CH(H, LH, U, E, K) |
| C6 | ★87-010-197-019 | CAP, CHIP S 0.01-25 B(H, LH, U, E, K) |
| C7 | ★87-010-544-019 | CAP, ELECT 0.1-50(H, LH, U, E, K) |
| C8 | ★87-010-146-019 | CAP, CHIP S 2P-50 CH(H, LH, U, E, K) |
| C8 | ★87-012-153-010 | CAP, CHIP S 120P-50 CH(HD) |
| C9 | ★87-010-151-019 | CAP, CHIP S 7P-50 CH(H, LH, U, E, K) |
| C9 | ★87-015-819-010 | CAP, CHIP 0.01(HD) |
| C10 | ★87-010-321-019 | CAP, CHIP S 82P-50 CH(H, LH, U, E, K) |
| C10 | ★87-010-154-010 | CAP, CHIP S 10P-50 CH(HD) |
| C11 | ★87-010-312-019 | CAP, CHIP S 15P-50 CH(H, LH, U, E, K) |
| C11 | ★87-010-148-010 | CAP, CHIP S 4P-50 CH(HD) |
| C12 | ★87-010-197-019 | CAP, CHIP S 0.01-25 B(H, LH, U, E, K) |
| C12 | ★87-012-154-010 | CAP, CHIP S 150P-50 CH(HD) |
| C13 | ★87-012-157-019 | CAP, CHIP S 330P-50 CH (H, LH, U, E, K) |
| C14 | ★87-010-148-019 | CAP, CHIP S 4P-50 CH(H, LH, U, E, K) |
| C15 | ★87-010-312-019 | CAP, CHIP S 15P-50 CH(H, LH, U, E, K) |
| C16 | ★87-010-178-019 | CAP, CHIP S 1000P-50 B (H, LH, U, E, K) |
| C16 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B(HD) |
| C17 | ★87-010-197-019 | CAP, CHIP S 0.01-25 B(H, LH, U, E, K) |
| C17 | ★87-010-544-010 | CAP, ELECT 0.1-50(HD) |
| C18 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B |
| C19 | ★87-010-312-019 | CAP, CHIP S 15P-50 CH(H, LH, U, E, K) |
| C19 | ★87-010-150-010 | CAP, CHIP S 6P-50 CH(HD) |
| C20 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B |
| C21 | ★87-010-197-019 | CAP, CHIP S 0.01-25 B(H, LH, U, E, K) |
| C21 | ★87-010-178-010 | CAP, CHIP S 1000P-50 B(HD) |
| C22 | ★87-010-197-019 | CAP, CHIP S 0.01-25 B(H, LH, U, E, K) |
| C22 | ★87-012-150-010 | CAP, CHIP S 20P-50 CH(HD) |
| C23 | ★87-010-197-019 | CAP, CHIP S 0.01-25 B(H, LH, U, E, K) |
| C23 | ★87-012-158-010 | CAP, CHIP S 390P-50 CH(HD) |
| C24 | ★87-010-322-019 | CAP, CHIP S 100P-50 CH(E, K) |
| C25 | ★87-010-171-019 | CAP, CHIP S 270P-50 SL (H, LH, U, E, K) |
| C26 | ★87-018-147-019 | CAP, CERA-SOL SS 10P-50 CH (H, LH, U, E, K) |
| C27 | ★87-018-125-019 | CAP, CERA-SOL SS 330P-50 B (H, LH, U, E, K) |
| C28 | ★87-018-119-019 | CAP, CERA-SOL SS 100P-50 B (H, LH, U, E, K) |
| C28 | ★87-010-321-010 | CAP, CHIP S 82P-50 CH(HD) |
| C29 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B(HD) |
| C30 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B(HD) |
| C31 | ★87-010-544-019 | CAP, ELECT 0.1-50(H, LH, U, E, K) |
| C31 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B(HD) |
| C35 | ★87-012-154-019 | CAP, CHIP S 150P-50 CH(E, K) |
| C36 | ★87-010-321-019 | CAP, CHIP S 82P-50 CH(E, K) |
| C37 | ★87-012-158-019 | CAP, CHIP S 390P-50 CH (H, LH, U, E, K) |
| C38 | ★87-010-336-019 | CAP, CHIP S 18P-50 UJ(H, LH, U, E, K) |
| C40 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B(HD) |
| C41 | ★87-010-260-010 | CAP, ELECT 47-25 SME(HD) |
| C51 | ★87-010-312-010 | CAP, CHIP S 15P-50 CH(HD) |
| C52 | ★87-010-154-010 | CAP, CHIP S 10P-50 CH(HD) |
| C53 | ★87-010-197-010 | CAP, CHIP S 0.01-25 B(HD) |
| C54 | ★87-010-198-019 | CAP, CHIP S 0.022-25 B (H, LH, U, E, K) |
| C56 | ★87-010-198-019 | CAP, CHIP S 0.022-25 B (H, LH, U, E, K) |

| REF.NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C59 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C70 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C71 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C71 | ★87-010-198-010 | CAP,CHIP S 0.022-25 B(HD) |
| C72 | ★87-010-198-019 | CAP,CHIP S 0.022-25 B (H,LH,U,E,K) |
| C72 | ★87-010-248-010 | CAP,ELECT 220-10 SME(HD) |
| C73 | ★87-010-248-019 | CAP,ELECT 220-10 SME(H,LH,U,E,K) |
| C73 | ★87-010-402-010 | CAP,ELECT 2.2-50 SME(HD) |
| C74 | ★87-015-696-019 | CAP,ELECT 2.2-50 7L(H,LH,U,E,K) |
| C74 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C75 | ★87-010-186-019 | CAP,CHIP S 4700P-50 B |
| C76 | ★87-010-188-019 | CAP,CHIP S 6800P-50 B (H,LH,U,E,K) |
| C76 | ★87-012-156-010 | CAP,CHIP S 220P CH(HD) |
| C77 | ★87-012-156-019 | CAP,CHIP S 220P CH(H,LH,U,E,K) |
| C77 | ★87-010-401-010 | CAP,ELECT 1-50 SME(HD) |
| C78 | ★87-010-401-019 | CAP,ELECT 1-50 SME(H,LH,U,E,K) |
| C79 | ★87-010-401-010 | CAP,ELECT 1-50 SME |
| C80 | ★87-010-546-019 | CAP,ELECT 0.33-50 SME (H,LH,U,E,K) |
| C80 | ★87-010-401-010 | CAP,ELECT 1-50 SME(HD) |
| C81 | ★87-010-401-019 | CAP,ELECT 1-50 SME(H,LH,U,E,K) |
| C81 | ★87-010-546-010 | CAP,ELECT 0.33-50 SME(HD) |
| C82 | ★87-010-196-019 | CAP,CHIP S 0.1-25 F(H,LH,U,E,K) |
| C83 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C84 | ★87-010-401-019 | CAP,ELECT 1-50 SME(H,LH,U,E,K) |
| C84 | ★87-010-196-010 | CAP,CHIP S 0.1-25 F(HD) |
| C85 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B |
| C86 | ★87-010-404-019 | CAP,ELECT 4.7-50 SME(H,LH,U,E,K) |
| C86 | ★87-010-452-010 | CAP,CHIP 1-16 F(HD) |
| C87 | ★87-010-401-019 | CAP,ELECT 1-50 SME(H,LH,U,E,K) |
| C87 | ★87-010-378-010 | CAP,ELECT 10-16(HD) |
| C88 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C89 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C89 | ★87-012-158-010 | CAP,CHIP S 390P-50 CH(HD) |
| C90 | ★87-010-405-019 | CAP,ELECT 10-50 SME(H,LH,U,E,K) |
| C90 | ★87-010-322-010 | CAP,CHIP S 100P-50 CH(HD) |
| C91 | ★87-010-544-019 | CAP,ELECT 0.1-50 (H,LH,U,E,K) |
| C91 | ★87-010-198-010 | CAP,CHIP S 0.022-25 B(HD) |
| C92 | ★87-010-188-019 | CAP,CHIP S 6800P-50 B(E,K) |
| C92 | ★87-010-189-019 | CAP,CHIP S 8200P-50 B(H,LH,U) |
| C92 | ★87-010-378-010 | CAP,ELECT 10-16(HD) |
| C93 | ★87-010-178-019 | CAP,CHIP S 1000P-50 B (H,LH,U,E,K) |
| C93 | ★87-012-158-010 | CAP,CHIP S 390P-50 CH(HD) |
| C94 | ★87-010-178-019 | CAP,CHIP S 1000P-50 B (H,LH,U,E,K) |
| C94 | ★87-010-334-010 | CAP,CHIP S 12P-50 UJ(HD) |
| C95 | ★87-010-188-019 | CAP,CHIP S 6800P-50 B(E,K) |
| C95 | ★87-010-189-019 | CAP,CHIP S 8200P-50 B(H,LH,U) |
| C95 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C96 | ★87-010-544-019 | CAP,ELECT 0.1-50 SME |
| C97 | ★87-010-221-019 | CAP,ELECT 470-10(H,LH,U,E,K) |
| C98 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C105 | ★87-010-544-010 | CAP,ELECT 0.1-50(HD) |
| C106 | ★87-010-544-010 | CAP,ELECT 0.1-50(HD) |
| C107 | ★87-010-220-010 | CAP,CHIP S 0.018-25 B(HD) |
| C108 | ★87-010-220-010 | CAP,CHIP S 0.018-25 B(HD) |
| C111 | ★87-010-314-019 | CAP,CHIP S 22P-50 CH(H,LH,U,E,K) |
| C111 | ★87-010-221-010 | CAP,ELECT 470-10(HD) |
| C112 | ★87-010-314-019 | CAP,CHIP S 22P-50 CH(H,LH,U,E,K) |
| C113 | ★87-010-178-019 | CAP,CHIP S 1000P-50 B (H,LH,U,E,K) |
| C115 | ★87-010-322-019 | CAP,CHIP S 100P-50 CH (H,LH,U,E,K) |
| C116 | ★87-010-322-019 | CAP,CHIP S 100P-50 CH (H,LH,U,E,K) |

| REF.NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C117 | ★87-010-322-019 | CAP,CHIP S 100P-50 CH (H,LH,U,E,K) |
| C118 | ★87-010-322-019 | CAP,CHIP S 100P-50 CH (H,LH,U,E,K) |
| C119 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C120 | ★87-010-248-019 | CAP,ELECT 220-10(H,LH,U,E,K) |
| C121 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C122 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C123 | ★87-015-696-019 | CAP,ELECT 2.2-50 7L(H,LH,U,E,K) |
| C124 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C125 | ★87-012-317-019 | CAP,CHIP S 39P-50 CH(H,LH,U,E,K) |
| C126 | ★87-010-316-019 | CAP,CHIP S 33P-50 CH(H,LH,U,E,K) |
| C128 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C129 | ★87-010-260-019 | CAP,ELECT 47-25 SME(H,LH,U,E,K) |
| C130 | ★87-012-149-010 | CAP,CHIP S 30P-50 CH(HD) |
| C131 | ★87-010-315-010 | CAP,CHIP S 27P-50 CH(HD) |
| C132 | ★87-010-322-010 | CAP,CHIP S 100P-50 CH(HD) |
| C133 | ★87-010-322-010 | CAP,CHIP S 100P-50 CH(HD) |
| C134 | ★87-010-322-010 | CAP,CHIP S 100P-50 CH(HD) |
| C135 | ★87-010-318-019 | CAP,CHIP S 47P-50 CH(H,LH,U,E,K) |
| C135 | ★87-010-322-010 | CAP,CHIP S 100P-50 CH(HD) |
| C136 | ★87-010-197-019 | CAP,CHIP S 0.01-25 B(H,LH,U,E,K) |
| C136 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C137 | ★87-010-263-010 | CAP,ELECT 100-10(HD) |
| C138 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C139 | ★87-010-403-010 | CAP,ELECT 3.3-50 SME(HD) |
| C140 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C152 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C155 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C157 | ★87-010-178-010 | CAP,CHIP S 1000P-50 B(HD) |
| C158 | ★87-010-314-010 | CAP,CHIP S 22P-50 CH(HD) |
| C159 | ★87-010-314-010 | CAP,CHIP S 22P-50 CH(HD) |
| C160 | ★87-010-318-010 | CAP,CHIP S 47P-50 CH(HD) |
| C161 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C162 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C163 | ★87-010-321-010 | CAP,CHIP S 82P-50 CH(HD) |
| C165 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C170 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C171 | ★87-010-993-010 | CAP,CHIP S 0.056-25 B(HD) |
| C172 | ★87-010-404-010 | CAP,ELECT 4.7-50 SME(HD) |
| C173 | ★87-010-198-010 | CAP,CHIP S 0.022-25 B(HD) |
| C174 | ★87-012-141-010 | CAP,CHIP S 0.22-16 F(HD) |
| C175 | ★87-010-401-010 | CAP,ELECT 1-50 SME(HD) |
| C176 | ★87-010-401-010 | CAP,ELECT 1-50 SME(HD) |
| C177 | ★87-010-263-010 | CAP,ELECT 100-10(HD) |
| C178 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C179 | ★87-010-313-010 | CAP,CHIP S 18P-50 CH(HD) |
| C180 | ★87-010-749-010 | CAP,CHIP S 0.047-25 B(HD) |
| C181 | ★87-010-749-010 | CAP,CHIP S 0.047-25 B(HD) |
| C182 | ★87-010-402-010 | CAP,ELECT 2.2-50 SME(HD) |
| C183 | ★87-010-993-010 | CAP,CHIP S 0.056-25 B(HD) |
| C184 | ★87-010-263-010 | CAP,ELECT 100-10(HD) |
| C185 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C186 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C187 | ★87-010-993-010 | CAP,CHIP S 0.056-25 B(HD) |
| C188 | ★87-010-993-010 | CAP,CHIP S 0.056-25 B(HD) |
| C189 | ★87-010-197-010 | CAP,CHIP S 0.01-25 B(HD) |
| C190 | ★87-010-402-010 | CAP,ELECT 2.2-50 SME(HD) |
| C195 | ★87-010-314-019 | CAP,CHIP S 22P-50 CH(H,LH,U,E,K) |
| C210 | ★87-015-766-010 | CAP,CHIP 150P-SL,K(HD) |
| C303 | ★87-010-805-010 | CAP,CHIP S 1-16F(HD) |
| C309 | ★87-010-405-010 | CAP,ELECT 10-50 SME(HD) |
| CF1 | ★87-008-261-019 | FILTER,SFE10.7MA5-A(H,LH,U) |
| CF1 | ★87-008-264-019 | FILTER,SFE10.7MS2-A(E,K) |
| CF1 | ★87-008-335-010 | FILTER,SFE10.7MA5-HW(HD) |
| CF2 | ★87-008-261-019 | FILTER,SFE10.7MA5-A(H,LH,U) |
| CF2 | ★87-008-264-019 | FILTER,SFE10.7MS2-A(E,K) |
| CF2 | ★87-008-335-010 | FILTER,SFE10.7MA5-HW(HD) |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| IFT1 | ★87-008-458-019 | IFT, FM (QUAD) PS(H, LH, U, E, K) |
| IFT1 | ★87-008-470-010 | IFT, FM (QUAD) PS(HD) |
| L1 | ★87-003-098-010 | COIL 2.2UH(HD) |
| L2 | ★87-003-241-010 | COIL, CHIP S 4.7UH(HD) |
| L3 | ★87-003-098-019 | COIL 2.2UH(H, LH, U, E, K) |
| L4 | ★87-003-152-019 | COIL 100UH(H, LH, U, E, K) |
| L6 | ★87-003-152-019 | COIL 100UH(H, LH, U, E, K) |
| L6 | ★87-007-299-010 | COIL OSC AM PS(HD) |
| L7 | ★87-007-253-019 | COIL OSC LW PS(E, K) |
| L7 | ★87-006-176-010 | COIL MW ANTENNA(HD) |
| L8 | ★87-007-301-019 | COIL OSC MW PS(H, LH, U, E, K) |
| L14 | ★87-003-149-010 | COIL 47UH(HD) |
| L15 | ★87-003-246-019 | COIL, CHIP 33UH(H, LH, U, E, K) |
| MFT1 | ★87-008-460-019 | FILTER, CFMT 450PS |
| SFR1 | ★87-024-173-019 | SFR, 22K(H, LH, U, E, K) |
| SFR1 | ★87-024-353-010 | SFR, 10K DIA6 H(HD) |
| SFR2 | ★87-024-172-019 | SFR, 10K(H, LH, U, E, K) |
| VC1 | ★87-002-283-019 | VARICAP, CHIP SVC209-TA |
| VC2 | ★87-002-283-019 | VARICAP, CHIP SVC209-TA |
| VC3 | ★87-026-435-019 | VARICAP, CHIP KV1560(E, K) |
| VC3 | ★87-002-283-010 | VARICAP, CHIP SVC209-TA(HD) |
| VC4 | ★87-026-435-019 | VARICAP, CHIP KV1560 |
| X1 | ★87-030-243-019 | VIB, XTAL 7.2 MHZ |
| X2 | ★87-030-218-019 | VIB, CERAMIC KBR-457 HS15 |
| X3 | ★87-030-257-010 | VIB, CERAMIC CSA 3.60MG(HD) |

===MAIN CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C1 | ★87-018-117-019 | CAP, CERA-SOL SS 68P-50 SL |
| C2 | ★87-018-117-019 | CAP, CERA-SOL SS 68P-50 SL |
| C3 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C4 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C5 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C6 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C8 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C9 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C10 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C11 | ★87-010-387-019 | CAP, ELECT 470-25V |
| C12 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C13 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C14 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C15 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C16 | ★87-010-384-019 | CAP, ELECT 100-25 SME |
| C18 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C19 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C20 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C21 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C22 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C23 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C24 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C25 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C26 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C27 | ★80-AT1-616-019 | CAP, EDL 0.047-5.5 |
| C28 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C29 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C30 | ★87-018-150-019 | CAP, CERA-SOL SS 18P-50 CH |
| C31 | ★87-018-149-019 | CAP, CERA-SOL SS 15P-50 CH |
| C32 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C33 | ★87-010-544-019 | CAP, ELECT 0.1-50 |
| C34 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C35 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C36 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C37 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C38 | ★87-018-201-019 | CAP, CERA-SOL SS 5600P-16 X |
| C39 | ★87-018-201-019 | CAP, CERA-SOL SS 5600P-16 X |
| C40 | ★87-018-117-019 | CAP, CERA-SOL SS 68P-50 SL |
| C41 | ★87-018-117-019 | CAP, CERA-SOL SS 68P-50 SL |
| C42 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C43 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C45 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C50 | ★87-010-260-019 | CAP, ELECT 47-25 SME |
| CER1 | ★87-030-258-019 | VIB, CERAMIC KBR-4.0 MK |
| J1 | ★87-009-160-019 | JACK ASSY, 2P(AUX/DAT/MD/DCC) |
| L1 | ★81-559-654-019 | COIL TRAP MPX |
| L2 | ★81-559-654-019 | COIL TRAP MPX |
| L3 | ★87-003-149-019 | COIL 47UH |
| L4 | ★87-003-149-019 | COIL 47UH |
| L5 | ★87-003-098-019 | COIL 2.2UH |
| L10 | ★87-003-152-019 | COIL 100UH |
| LCD1 | ★81-NKB-604-019 | LCD E5300/E5336<br>(COMPACT DISC/TUNER MULTIPLEX DISPLAY) |
| ⚠R11 | ★87-029-108-019 | RES, FUSE 1.0-1/2W FM |
| ⚠R12 | ★87-029-089-019 | RES, FUSE 4.7-1/4W FM |
| ⚠R21 | ★87-029-019-019 | RES, FUSE 2.2-1/2W FM |
| ⚠R29 | ★87-029-105-019 | RES, FUSE 10-1/2W FM |
| X1 | ★87-030-238-019 | VIB, XTAL 4.19M 10PPM |

===CD MAIN CIRCUIT BOARD SECTON===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C1 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C2 | ★87-018-097-019 | CAP, CERA-SOL SS 2.2P-50 SL |
| C3 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F |
| C4 | ★87-018-113-019 | CAP, CERA-SOL SS 33P-50 SL |
| C6 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C7 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C9 | ★87-010-545-019 | CAP, ELECT 0.22-50 SME |
| C10 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C11 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C12 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C13 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C15 | ★87-010-265-019 | CAP, ELECT 33-16 SME |
| C16 | ★87-010-403-019 | CAP, ELECT 3.3-50 SME |
| C17 | ★87-010-374-019 | CAP, ELECT 47-10 |
| C22 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| C23 | ★87-018-117-019 | CAP, CERA-SOL SS 68P-50 SL |
| C24 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C25 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C26 | ★87-010-371-019 | CAP, ELECT 470-6.3 |
| C27 | ★87-010-236-019 | CAP, ELECT 1000-10 |
| C28 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F |
| C29 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F |
| C30 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F |
| C31 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F |
| C32 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F |
| C33 | ★87-018-109-019 | CAP, CERA-SOL SS 22P-50 SL |
| C34 | ★87-018-109-019 | CAP, CERA-SOL SS 22P-50 SL |
| C35 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C36 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C37 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C38 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C39 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C43 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F |
| C44 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C45 | ★87-018-119-019 | CAP, CERA-SOL SS 100P-50 B |
| C46 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C47 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C49 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C50 | ★87-010-371-019 | CAP, ELECT 470-6.3 |
| C51 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C52 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C53 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C199 | ★87-018-119-019 | CAP, CERA-SOL SS 100P-50 B |
| C901 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C902 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C903 | ★87-018-123-019 | CAP, CERA-SOL SS 220P-50 B |
| C904 | ★87-018-123-019 | CAP, CERA-SOL SS 220P-50 B |
| L1 | ★87-003-152-019 | COIL 100UH |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| L2 | ★87-003-152-019 | COIL 100UH |
| SFR1 | ★87-024-171-019 | SFR, 4.7K DIA6 V |
| SFR2 | ★87-024-176-019 | SFR, 100K DIA6 V |
| X1 | ★87-030-221-019 | CERALOCK 16.93MHZ |

===VOLUME CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C300 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C301 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C306 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C307 | ★87-018-131-019 | CAP, CERA-SOL SS 1000P-50 B |
| C308 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C309 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C310 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C311 | ★87-010-400-019 | CAP, ELECT 0.47-50 SME |
| C312 | ★87-010-400-019 | CAP, ELECT 0.47-50 SME |
| VOL1 | ★81-NKB-643-019 | MOTOR, VR 50KB L15(VOLUME) |
| M1 | + + + | VR, MOTOR(VOLUME) |
| VOL2 | ★87-024-339-019 | VR, 20KDX2(T-BASS) |
| VOL3 | ★87-024-340-019 | VR, 20KAX2(TREBLE) |
| VOL4 | ★87-024-341-019 | VR, 5KA(BBE) |
| VOL5 | ★81-NKB-644-019 | VR, 100KW(BALANCE) |

===SUB CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C200 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C201 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C202 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C203 | ★87-010-405-019 | CAP, ELECT 10-50 SME |
| C204 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C205 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C206 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| C207 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| C210 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C211 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C212 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C213 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C216 | ★87-018-119-019 | CAP, CERA-SOL SS 100P-50 B |
| C217 | ★87-018-119-019 | CAP, CERA-SOL SS 100P-50 B |
| C218 | ★87-010-545-019 | CAP, ELECT 0.22-50 SME |
| C219 | ★87-010-545-019 | CAP, ELECT 0.22-50 SME |
| C220 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| C221 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| C222 | ★87-010-400-019 | CAP, ELECT 0.47-50 SME |
| C223 | ★87-010-400-019 | CAP, ELECT 0.47-50 SME |
| C224 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C225 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C226 | ★87-018-123-019 | CAP, CERA-SOL SS 220P-50 B |
| C227 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C228 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C229 | ★87-018-123-019 | CAP, CERA-SOL SS 220P-50 B |
| C230 | ★87-010-263-019 | CAP, ELECT 100-10 |
| C231 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C232 | ★87-010-382-019 | CAP, ELECT 22-25 SME |
| C233 | ★87-010-248-019 | CAP, ELECT 220-10 SME |
| C234 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C235 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C236 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C237 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C238 | ★87-018-134-019 | CAP, CERA-SOL SS 0.01-16 Y |
| C239 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| C240 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C241 | ★87-010-404-019 | CAP, ELECT 4.7-50 SME |
| C242 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C243 | ★87-010-401-019 | CAP, ELECT 1-50 SME |
| C244 | ★87-010-400-019 | CAP, ELECT 0.47-50 SME |

==FUNCTION CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| LED500 | 87-001-590-010 | LED GL1PR111(TAPE) |
| LED501 | 87-001-590-010 | LED GL1PR111(MD/DAT/DCC) |
| LED502 | 87-001-590-010 | LED GL1PR111(TUNER) |
| LED503 | 87-001-590-010 | LED GL1PR111(CD) |
| LED504 | 87-002-811-010 | LED GL1HY111 (DISC TRAY BACK LIGHT) |
| LED505 | 87-002-811-010 | LED GL1HY111 (DISC TRAY BACK LIGHT) |
| LED506 | 87-002-811-010 | LED GL1HY111 (DISC TRAY BACK LIGHT) |
| LED507 | 87-002-811-010 | LED GL1HY111 (DISC TRAY BACK LIGHT) |
| LED508 | 87-002-811-010 | LED GL1HY111 (DISC TRAY BACK LIGHT) |
| LED509 | 87-002-811-010 | LED GL1HY111 (DISC TRAY BACK LIGHT) |
| SW500 | ★87-036-142-019 | TACT SW(TAPE) |
| SW501 | ★87-036-142-019 | TACT SW(MD/DAT/DCC) |
| SW502 | ★87-036-142-019 | TACT SW(TUNER) |
| SW503 | ★87-036-142-019 | TACT SW(CD) |

===CONTROL CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| SW400 | ★87-036-142-019 | TACT SW(POWER) |
| SW401 | ★87-036-142-019 | TACT SW(◀◀DOWN) |
| SW402 | ★87-036-142-019 | TACT SW(▶❚❚PLAY/PAUSE) |
| SW403 | ★87-036-142-019 | TACT SW(DISPLAY) |
| SW404 | ★87-036-142-019 | TACT SW(▶▶UP) |
| SW405 | ★87-036-142-019 | TACT SW(■STOP) |
| SW406 | ★87-036-142-019 | TACT SW(MEMORY/SET) |
| SW407 | ★87-036-142-019 | TACT SW(BAND) |
| SW408 | ★87-036-142-019 | TACT SW(OPEN/CLOSE) |

===ANT CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| CON700 | ★87-033-224-019 | TERMINAL, ANT 2P(FM 75) |
| CON701 | ★87-009-086-019 | CONNECTOR 3P S3B-XH-A <BLK>(AM LOOP) |
| FC700 | ★81-NKB-632-019 | FLAT CABLE 2P ANT |
| FC701 | ★81-NKB-632-019 | FLAT CABLE 2P ANT |

===LAMP CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| FC800 | ★81-NKB-626-019 | FLAT CABLE 2P LAMP |
| PL800 | ★87-035-429-010 | LAMP HRS-4110A(LCD BACK LIGHT) |
| PL801 | ★87-035-429-010 | LAMP HRS-4110A(LCD BACK LIGHT) |

===LED CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| LED600 | 87-001-590-010 | LED GL1PR111(VOLUME INDICATOR) |

==MOTOR-1 CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| M1 | 9X-262-513-210 | MOTOR GEAR ASSY(SLED) |
| M2 | 9X-262-513-310 | MOTOR ASSY(W/CHASSIS T.T) (SPINDLE) |
| SW1 | 91-572-085-110 | LEAF SW(INSIDE LIMIT) |

===MOTOR-2 CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| M3 | 9X-262-511-710 | MOTOR ASSY(LOADING) |
| SW2 | 91-572-086-110 | LEAF SW(OPEN) |
| SW3 | 91-572-086-110 | LEAF SW(CLOSE) |

===LOOP CIRCUIT BOARD SECTION===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C900 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F(E, K) |
| C901 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F(E, K) |
| C902 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| C903 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F (H, LH. U) |
| C903 | ★87-018-209-019 | CAP, CERA-SOL SS 0.1-50 F(E, K) |
| C904 | ★87-018-205-019 | CAP, CERA-SOL SS 0.022-25 F |
| L1 | ★81-NKB-656-019 | COIL, ANT LW 3B(E, K) |
| L2 | ★81-006-176-019 | COIL, ANT MW |

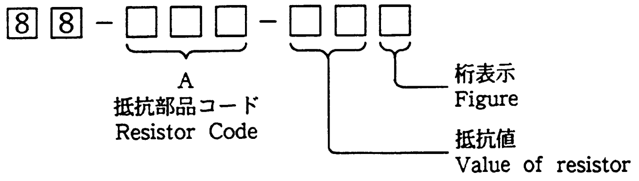
===MISCELLANEOUS===

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
|  | 98-848-127-11Z | OPTICAL PICK UP KSS-210A |
|  | ★89-VT5-202-010 | BUSHING, CORD |
| FC300 | ★81-NKB-624-019 | FLAT CABLE 14P VOL |

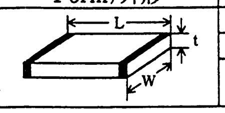
| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| FC400 | ★81-NKB-625-019 | FLAT CABLE 11P CTL |
| FC500 | ★81-NKB-623-019 | FLAT CABLE 8P FUNC |

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

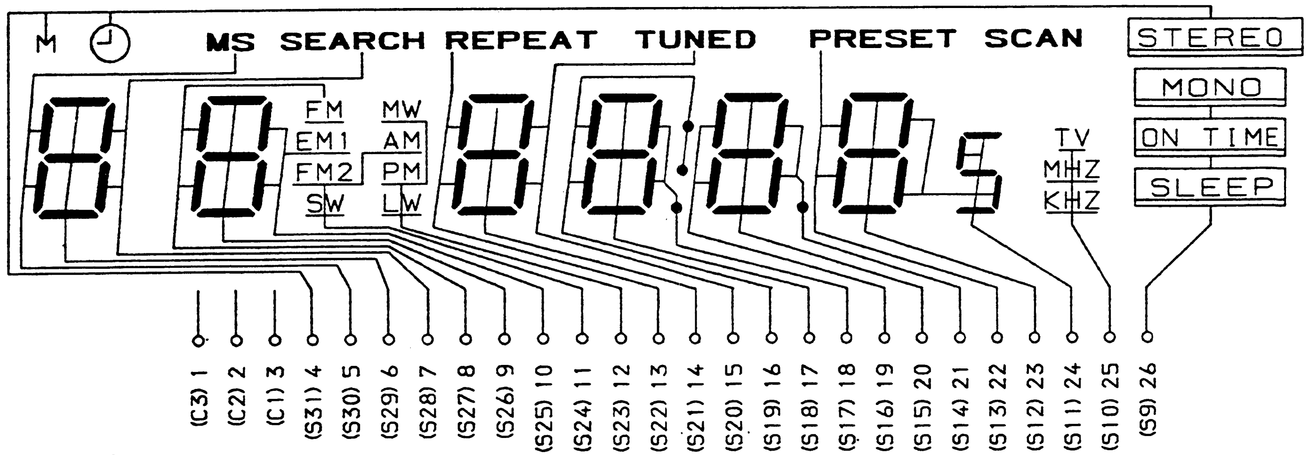


チップ抵抗
Chip resistor

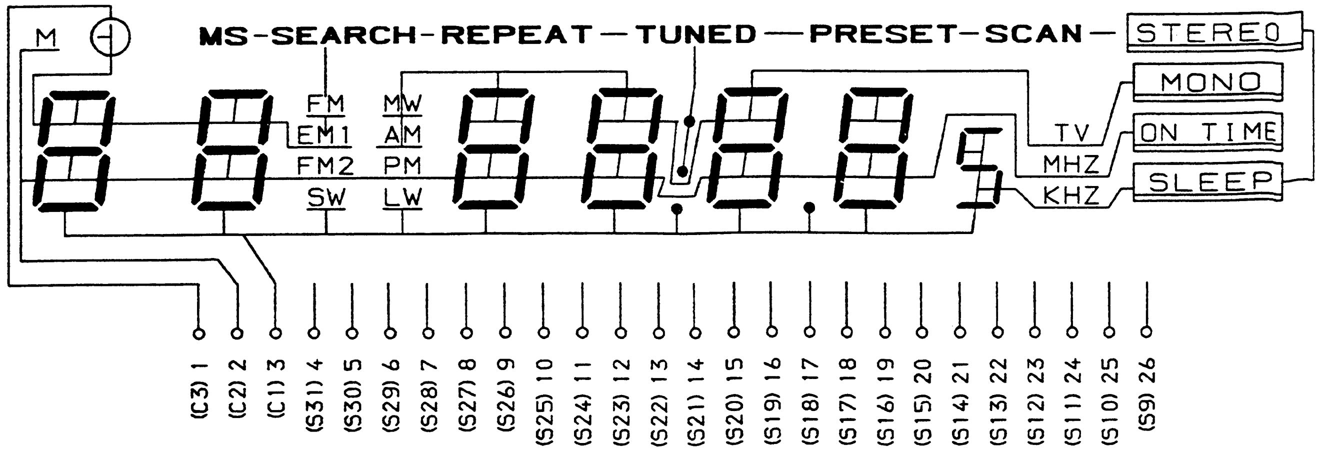
| Wattage 容量 | Type 種類 | Tolerance 許容誤差 | Symbol 記号 | Dimensions／寸法 (mm) |  |  |  | Resistor Code : A 抵抗コード : A |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Form/外形 | L | W | t |  |
| 1/32W | 1608 | ±5% | CJ |  | 1.6 | 0.8 | 0.35 | 108 |
| 1/10W | 2125 | ±5% | CJ |  | 2 | 1.25 | 1.45 | 118 |
| 1/8W | 3126 | ±5% | CJ |  | 3.2 | 1.6 | 0.5 ~0.7 | 128 |

## LCD DISPLAY (RDX－01)

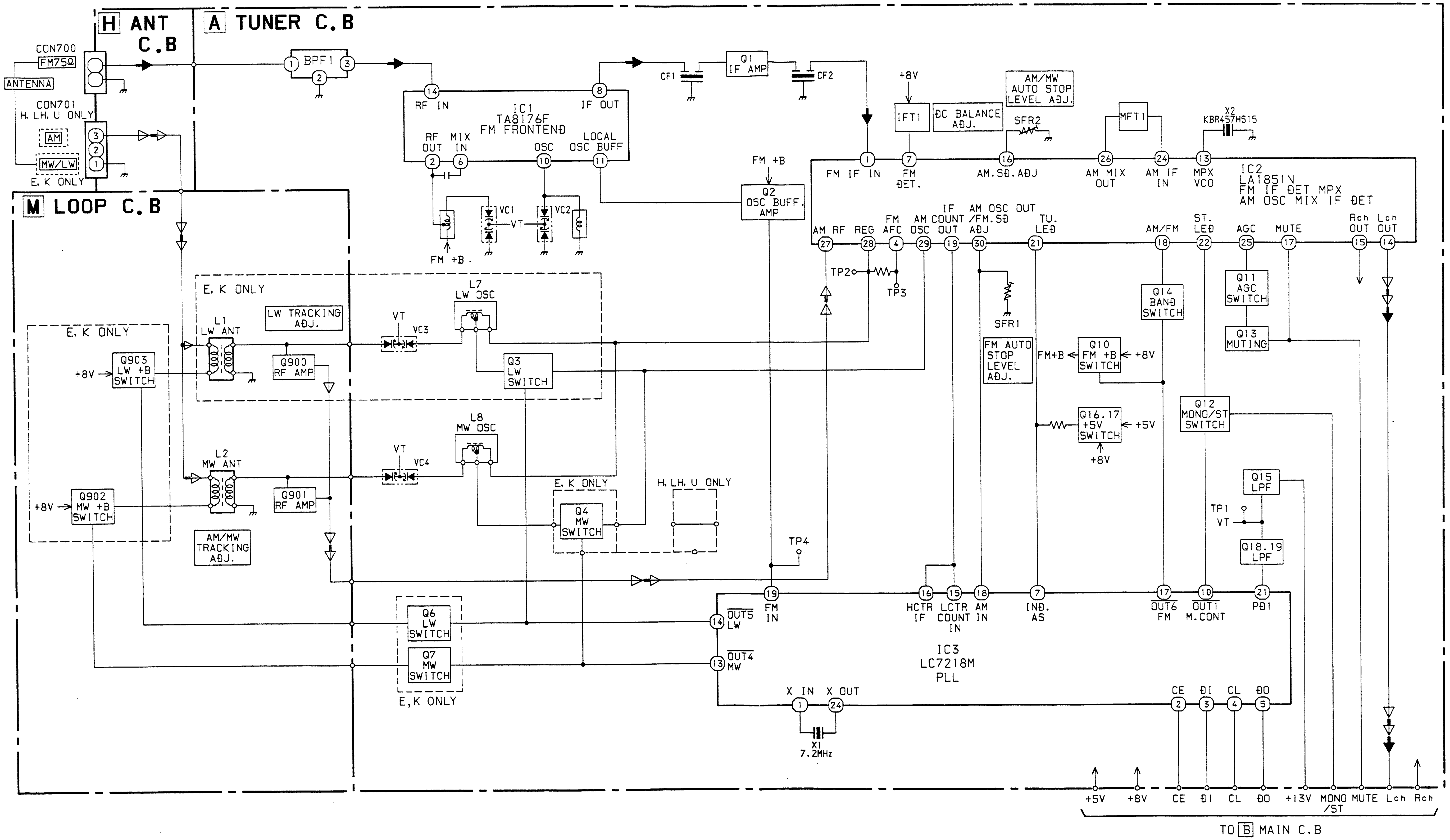
SEGMENT



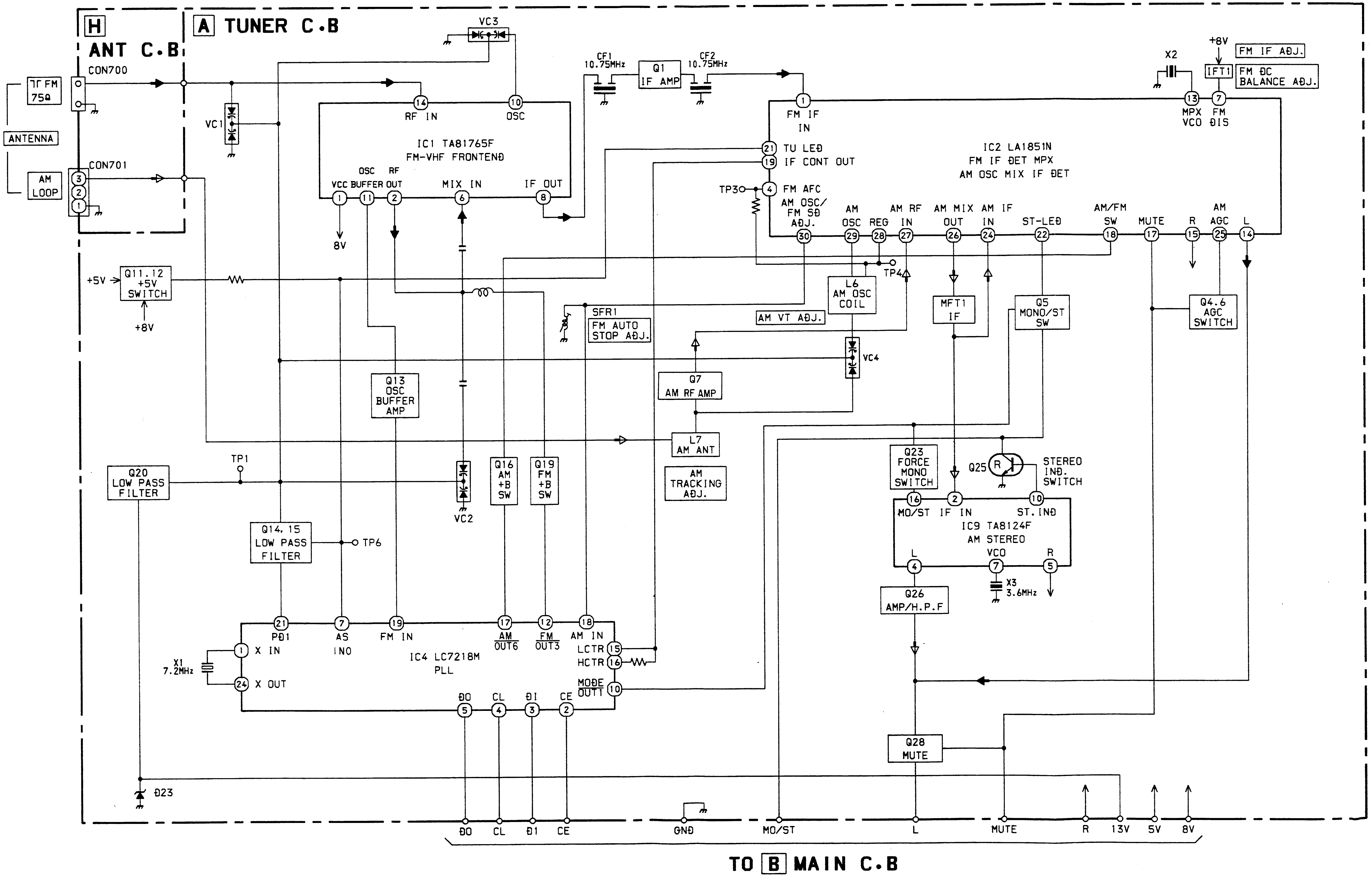
COMMON



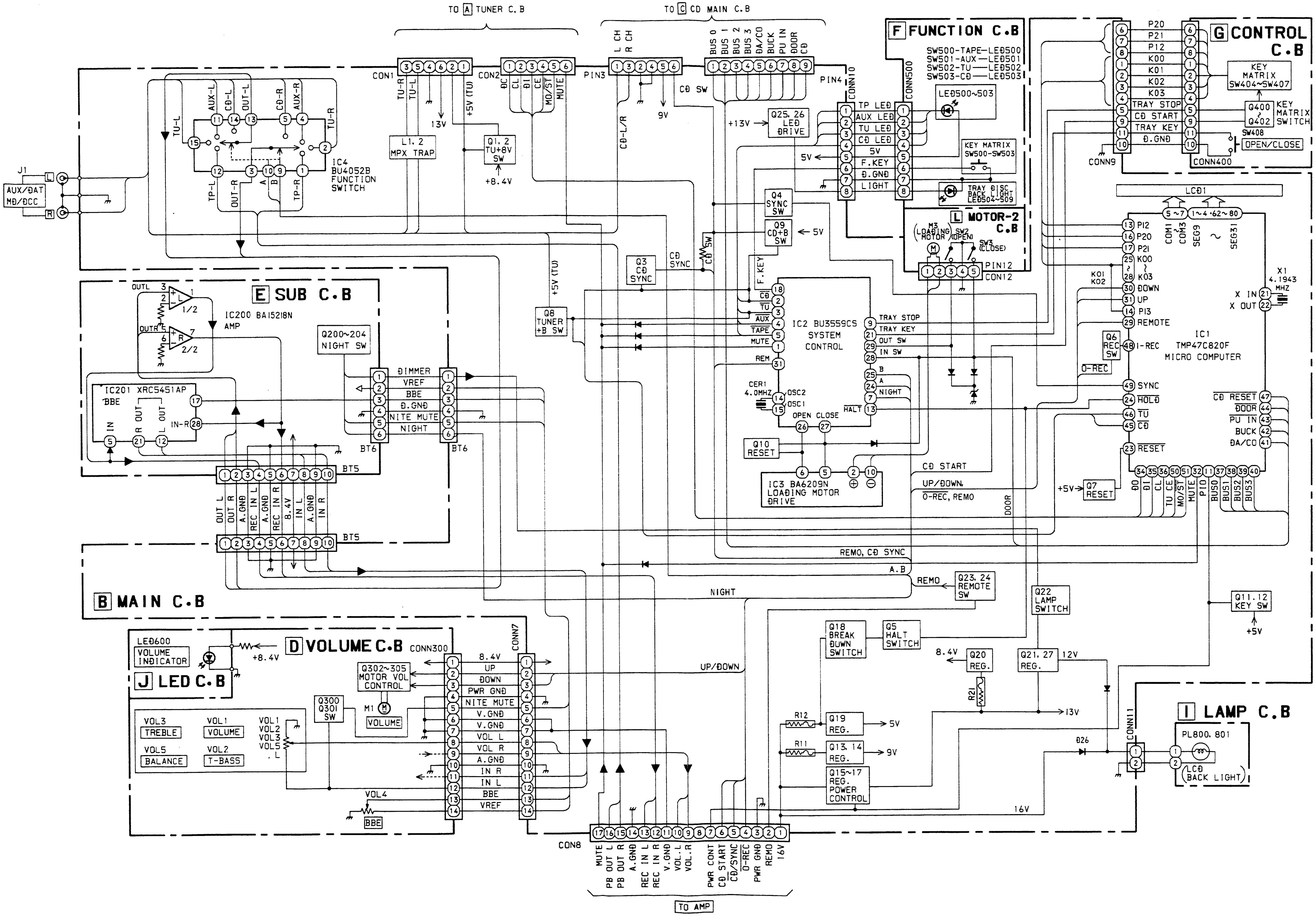
## BLOCK DIAGRAM – 1 (RDX – 01 : TUNER) ⟨H, LH, U, E, K⟩


H ANT C.B
A TUNER C.B
M LOOP C.B
CON700
FM75Ω
ANTENNA
CON701
H, LH, U ONLY
AM
MW/LW
E, K ONLY
BPF1
IC1
TA8176F
FM FRONTEND
RF IN
IF OUT
RF OUT
MIX IN
OSC
LOCAL OSC BUFF
VC1
VC2
VT
FM +B
CF1
Q1
IF AMP
CF2
Q2
OSC BUFF. AMP
FM +B
+8V
IFT1
DC BALANCE ADJ.
AM/MW AUTO STOP LEVEL ADJ.
SFR2
MFT1
X2
KBR457HS15
IC2
LA1851N
FM IF DET MPX
AM OSC MIX IF DET
FM IF IN
FM DET.
AM.SD.ADJ
AM MIX OUT
AM IF IN
MPX VCO
AM RF
REG
FM AFC
AM OSC
IF COUNT OUT
AM OSC OUT /FM.SD ADJ
TU. LED
AM/FM
ST. LED
AGC
MUTE
Rch OUT
Lch OUT
TP2
TP3
SFR1
FM AUTO STOP LEVEL ADJ.
Q14
BAND SWITCH
Q11
AGC SWITCH
Q13
MUTING
Q10
FM +B SWITCH
FM+B
+8V
Q16,17
+5V SWITCH
+5V
+8V
Q12
MONO/ST SWITCH
Q15
LPF
TP1
VT
Q18,19
LPF
E, K ONLY
L7
LW OSC
LW TRACKING ADJ.
VT
VC3
L1
LW ANT
Q900
RF AMP
Q3
LW SWITCH
E, K ONLY
Q903
LW +B SWITCH
+8V
L8
MW OSC
VT
VC4
L2
MW ANT
Q901
RF AMP
Q902
MW +B SWITCH
+8V
AM/MW TRACKING ADJ.
E, K ONLY
Q4
MW SWITCH
H, LH, U ONLY
TP4
Q6
LW SWITCH
Q7
MW SWITCH
E,K ONLY
IC3
LC7218M
PLL
FM IN
HCTR IF
LCTR COUNT IN
AM IN
IND. AS
OUT6 FM
OUT1 M.CONT
PD1
OUT5 LW
OUT4 MW
X IN
X OUT
X1
7.2MHz
CE
DI
CL
DO
+5V
+8V
CE
DI
CL
DO
+13V
MONO /ST
MUTE
Lch
Rch
TO B MAIN C.B

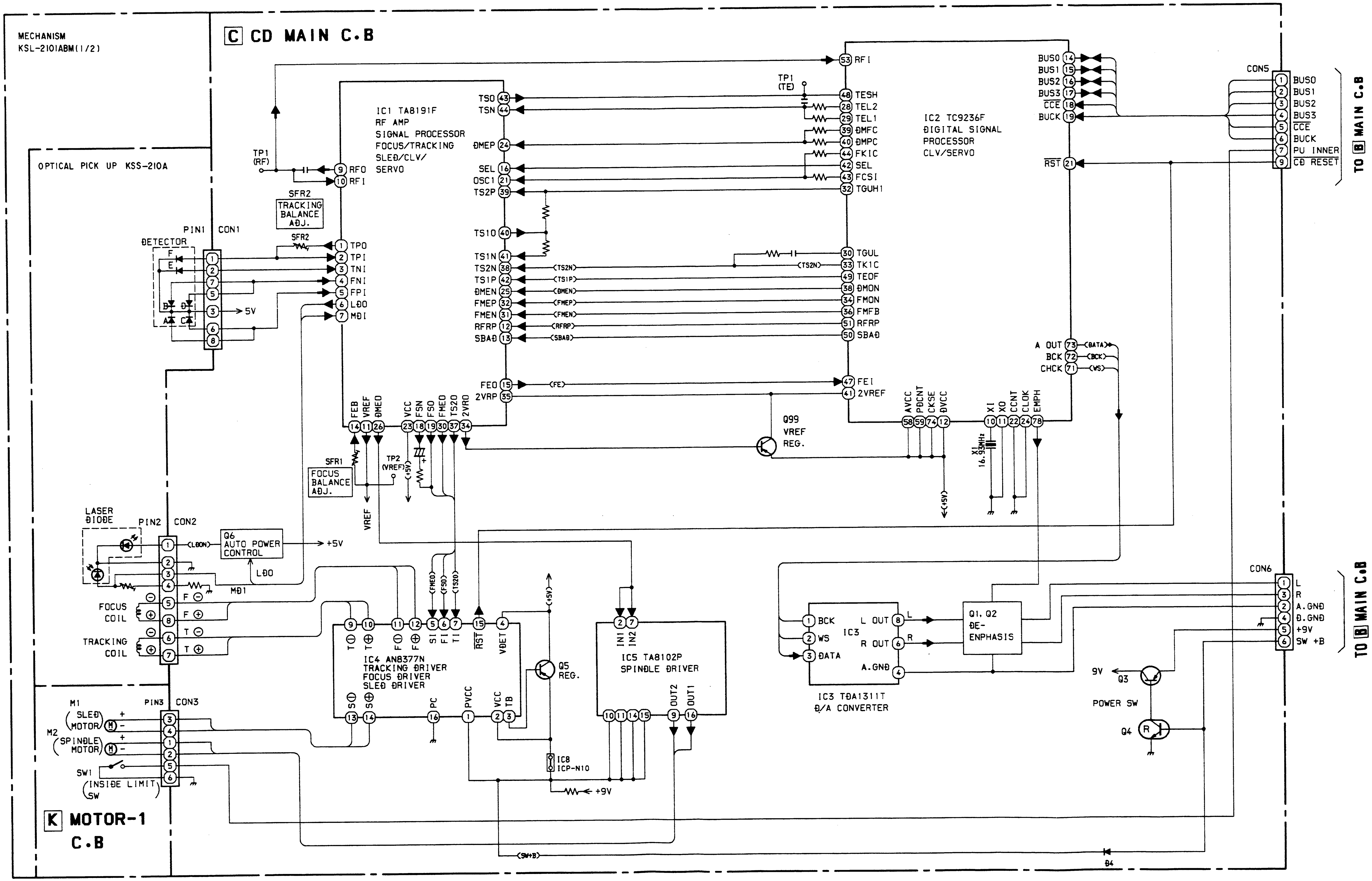
# BLOCK DIAGRAM – 2 (RDX – 01 : TUNER) ⟨HD⟩


H ANT C.B
A TUNER C.B
FM 75Ω
ANTENNA
AM LOOP
CON700
CON701
VC1
VC3
VC2
VC4
CF1 10.75MHz
CF2 10.75MHz
Q1 IF AMP
IC1 TA81765F
FM-VHF FRONTEND
RF IN
OSC
VCC
OSC BUFFER
RF OUT
MIX IN
IF OUT
8V
IC2 LA1851N
FM IF DET MPX
AM OSC MIX IF DET
FM IF IN
TU LED
IF CONT OUT
FM AFC
TP3
AM OSC/ FM SD ADJ.
AM OSC
REG
AM RF IN
AM MIX OUT
AM IF IN
ST-LED
AM/FM SW
MUTE
R
AM AGC
L
MPX VCO
FM DIS
X2
+8V
IFT1
FM IF ADJ.
FM DC BALANCE ADJ.
TP4
L6 AM OSC COIL
AM VT ADJ.
MFT1 IF
Q5 MONO/ST SW
Q4.6 AGC SWITCH
+5V
Q11.12 +5V SWITCH
+8V
SFR1
FM AUTO STOP ADJ.
Q7 AM RF AMP
Q13 OSC BUFFER AMP
L7 AM ANT
AM TRACKING ADJ.
TP1
Q20 LOW PASS FILTER
Q16 AM +B SW
Q19 FM +B SW
Q14. 15 LOW PASS FILTER
TP6
Q23 FORCE MONO SWITCH
Q25
STEREO IND. SWITCH
IC9 TA8124F
AM STEREO
MO/ST
IF IN
ST.IND
VCO
X3 3.6MHz
Q26 AMP/H.P.F
IC4 LC7218M
PLL
PD1
AS INO
FM IN
AM OUT6
FM OUT3
AM IN
X1 7.2MHz
X IN
X OUT
LCTR
HCTR
MODE OUT1
DO
CL
DI
CE
Q28 MUTE
D23
DO CL DI CE GND MO/ST L MUTE R 13V 5V 8V
TO B MAIN C.B

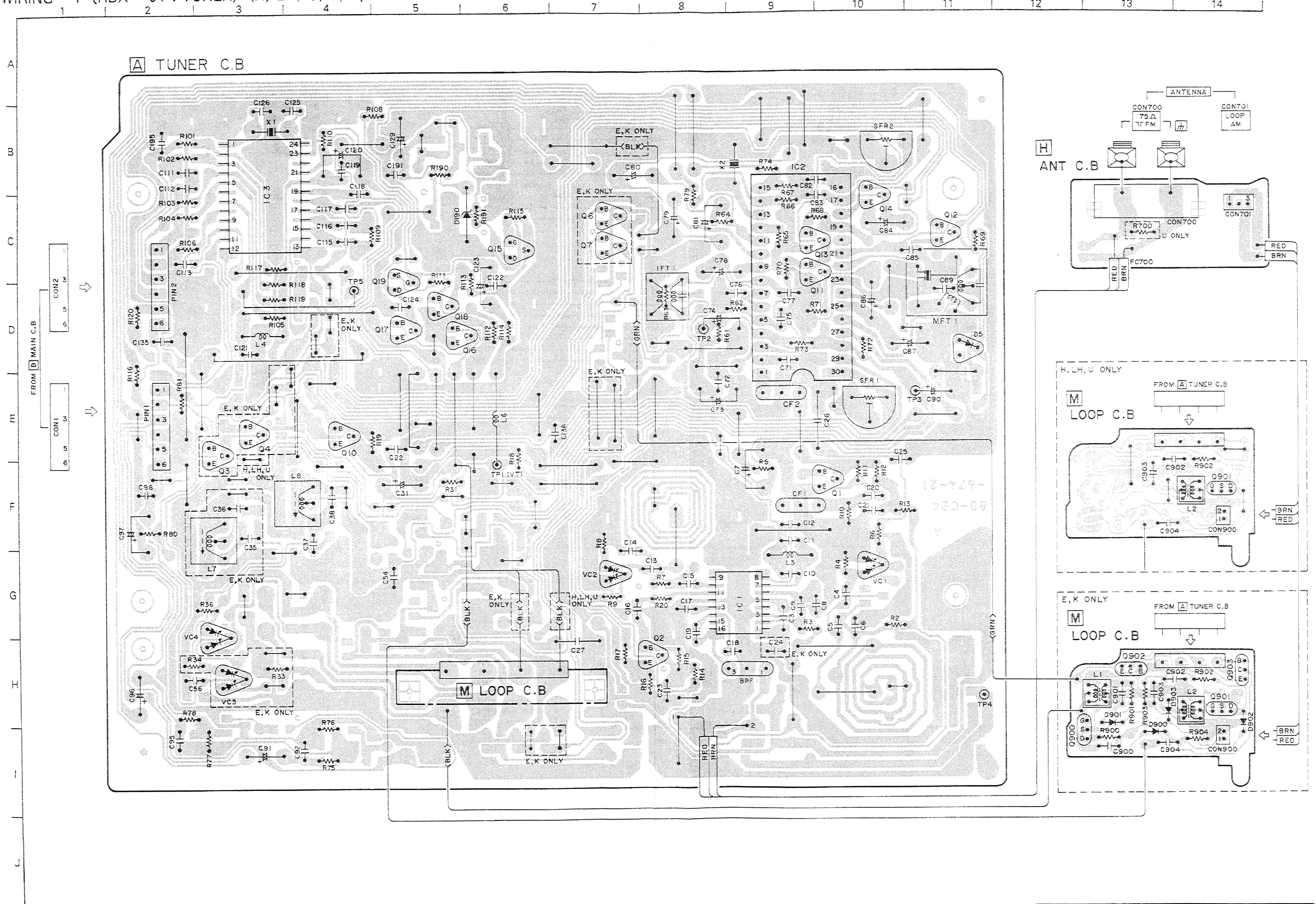
## BLOCK DIAGRAM – 3 (RDX – 01 : MAIN)


TO A TUNER C.B
TO C CD MAIN C.B
CON1
CON2
PIN3
PIN4
TU-R
TU-L
13V
+5V (TU)
DC
CL
DI
CE
MO/ST
MUTE
L CH
R CH
CD-L/R
9V
CD SW
BUS 0
BUS 1
BUS 2
BUS 3
DA/CO
BUCK
PU IN
DOOR
CD
AUX-L
CD-L
OUT-L
CD-R
AUX-R
TP-L
OUT-R
TP-R
IC4
BU4052B
FUNCTION
SWITCH
J1
AUX/DAT
MD/DCC
L1, 2
MPX TRAP
Q1, 2
TU+8V
SW
+8.4V
F FUNCTION C.B
SW500-TAPE-LED500
SW501-AUX-LED501
SW502-TU-LED502
SW503-CD-LED503
LED500~503
KEY MATRIX
SW500-SW503
TRAY DISC
BACK LIGHT
LED504~509
CONN10
CONN500
TP LED
AUX LED
TU LED
CD LED
5V
F.KEY
D.GND
LIGHT
Q25, 26
LED
DRIVE
+13V
Q4
SYNC
SW
Q9
CD+B
SW
Q3
CD
SYNC
CD SYNC
CD SW
F.KEY
G CONTROL C.B
P20
P21
P12
K00
K01
K02
K03
TRAY STOP
CD START
TRAY KEY
D.GND
KEY MATRIX
SW404~SW407
Q400
Q402
KEY MATRIX SWITCH
SW408
OPEN/CLOSE
CONN9
CONN400
L MOTOR-2 C.B
M3
LOADING MOTOR
SW2 (OPEN)
SW3 (CLOSE)
PIN12
CON12
LCD1
5~7
1~4·62~80
COM1
COM3
SEG9
SEG31
P12
P20
P21
K00
K03
K01
K02
DOWN
UP
P13
REMOTE
IC1
TMP47C820F
MICRO COMPUTER
X1
4.1943 MHZ
X IN
X OUT
Q6
REC SW
I-REC
O-REC
SYNC
HOLD
TU
CD
RESET
CD RESET
DOOR
PU IN
BUCK
DA/CO
Q7
RESET
+5V
DO
DI
CL
CE
TU CE
MO/ST
MUTE
P10
BUS0
BUS1
BUS2
BUS3
IC2 BU3559CS
SYSTEM
CONTROL
CD
TU
AUX
TAPE
MUTE
REM
TRAY STOP
TRAY KEY
OUT SW
IN SW
B
A
NIGHT
HALT
CER1
4.0MHZ
OSC2
OSC1
OPEN CLOSE
Q10
RESET
IC3 BA6209N
LOADING MOTOR
DRIVE
CD START
UP/DOWN
O-REC, REMO
DOOR
Q8
TUNER
+B SW
+5V (TU)
E SUB C.B
OUTL
OUTR
IC200 BA15218N
AMP
1/2
2/2
Q200~204
NIGHT SW
IC201 XRC5451AP
BBE
IN
R OUT
L OUT
IN-R
DIMMER
VREF
BBE
D.GND
NITE MUTE
NIGHT
BT6
BT5
OUT L
OUT R
A.GND
REC IN L
A.GND
REC IN R
8.4V
IN L
A.GND
IN R
B MAIN C.B
REMO, CD SYNC
A.B
NIGHT
REMO
Q23, 24
REMOTE
SW
Q22
LAMP
SWITCH
Q11, 12
KEY SW
+5V
LED600
VOLUME
INDICATOR
J LED C.B
D VOLUME C.B
CONN300
CONN7
+8.4V
Q302~305
MOTOR VOL
CONTROL
M1
VOLUME
Q300
Q301
SW
VOL3
TREBLE
VOL1
VOLUME
VOL5
BALANCE
VOL2
T-BASS
VOL1
VOL2
VOL3
VOL5
L
VOL4
BBE
8.4V
UP
DOWN
PWR GND
NITE MUTE
V.GND
V.GND
VOL L
VOL R
A.GND
IN R
IN L
BBE
VREF
UP/DOWN
Q18
BREAK
DOWN
SWITCH
Q5
HALT
SWITCH
8.4V
Q20
REG.
R21
Q21, 27
REG.
12V
13V
R12
Q19
REG.
5V
R11
Q13, 14
REG.
9V
Q15~17
REG.
POWER
CONTROL
16V
D26
CONN11
I LAMP C.B
PL800, 801
LCD
BACK LIGHT
CON8
MUTE
PB OUT L
PB OUT R
A.GND
REC IN L
REC IN R
V.GND
VOL.L
VOL.R
PWR CONT
CD START
CD/SYNC
O-REC
PWR GND
REMO
16V
TO AMP

# BLOCK DIAGRAM – 4 (RDX – 01 : CD)


MECHANISM
KSL-2101ABM(1/2)
C CD MAIN C.B
OPTICAL PICK UP KSS-210A
DETECTOR
PIN1
CON1
TP1 (RF)
SFR2
TRACKING BALANCE ADJ.
IC1 TA8191F
RF AMP
SIGNAL PROCESSOR
FOCUS/TRACKING
SLED/CLV/
SERVO
RFO
RFI
TPO
TPI
TNI
FNI
FPI
LDO
MDI
5V
TSO
TSN
DMEP
SEL
OSC1
TS2P
TS10
TS1N
TS2N
TS1P
DMEN
FMEP
FMEN
RFRP
SBAD
FEO
2VRP
FEB
VREF
DMEO
VCC
FSN
FSO
FMEO
TS20
2VRO
SFR1
FOCUS BALANCE ADJ.
TP2 (VREF)
TP1 (TE)
IC2 TC9236F
DIGITAL SIGNAL
PROCESSOR
CLV/SERVO
RFI
TESH
TEL2
TEL1
DMFC
DMPC
FKIC
SEL
FCSI
TGUH1
TGUL
TK1C
TEOF
DMON
FMON
FMFB
RFRP
SBAD
FEI
2VREF
Q99
VREF
REG.
AVCC
PDCNT
CKSE
DVCC
XI
XO
CCNT
CLOK
EMPH
X1
16.93MHz
BUS0
BUS1
BUS2
BUS3
CCE
BUCK
RST
A OUT
BCK
CHCK
CON5
BUS0
BUS1
BUS2
BUS3
CCE
BUCK
PU INNER
CD RESET
TO B MAIN C.B
LASER DIODE
PIN2
CON2
Q6
AUTO POWER
CONTROL
+5V
LDO
MDI
FOCUS COIL
TRACKING COIL
F ⊖
F ⊕
T ⊖
T ⊕
IC4 AN8377N
TRACKING DRIVER
FOCUS DRIVER
SLED DRIVER
SI
FI
TI
RST
VDET
PC
PVCC
VCC
TB
Q5
REG.
IC8
ICP-N10
+9V
IC5 TA8102P
SPINDLE DRIVER
IN1
IN2
OUT2
OUT1
M1
SLED MOTOR
M2
SPINDLE MOTOR
SW1
INSIDE LIMIT SW
PIN3
CON3
K MOTOR-1 C.B
IC3
BCK
WS
DATA
L OUT
R OUT
A.GND
IC3 TDA1311T
D/A CONVERTER
Q1, Q2
DE-
ENPHASIS
9V
Q3
POWER SW
Q4
CON6
L
R
A.GND
D.GND
+9V
SW +B
TO B MAIN C.B
D4
(SW+B)

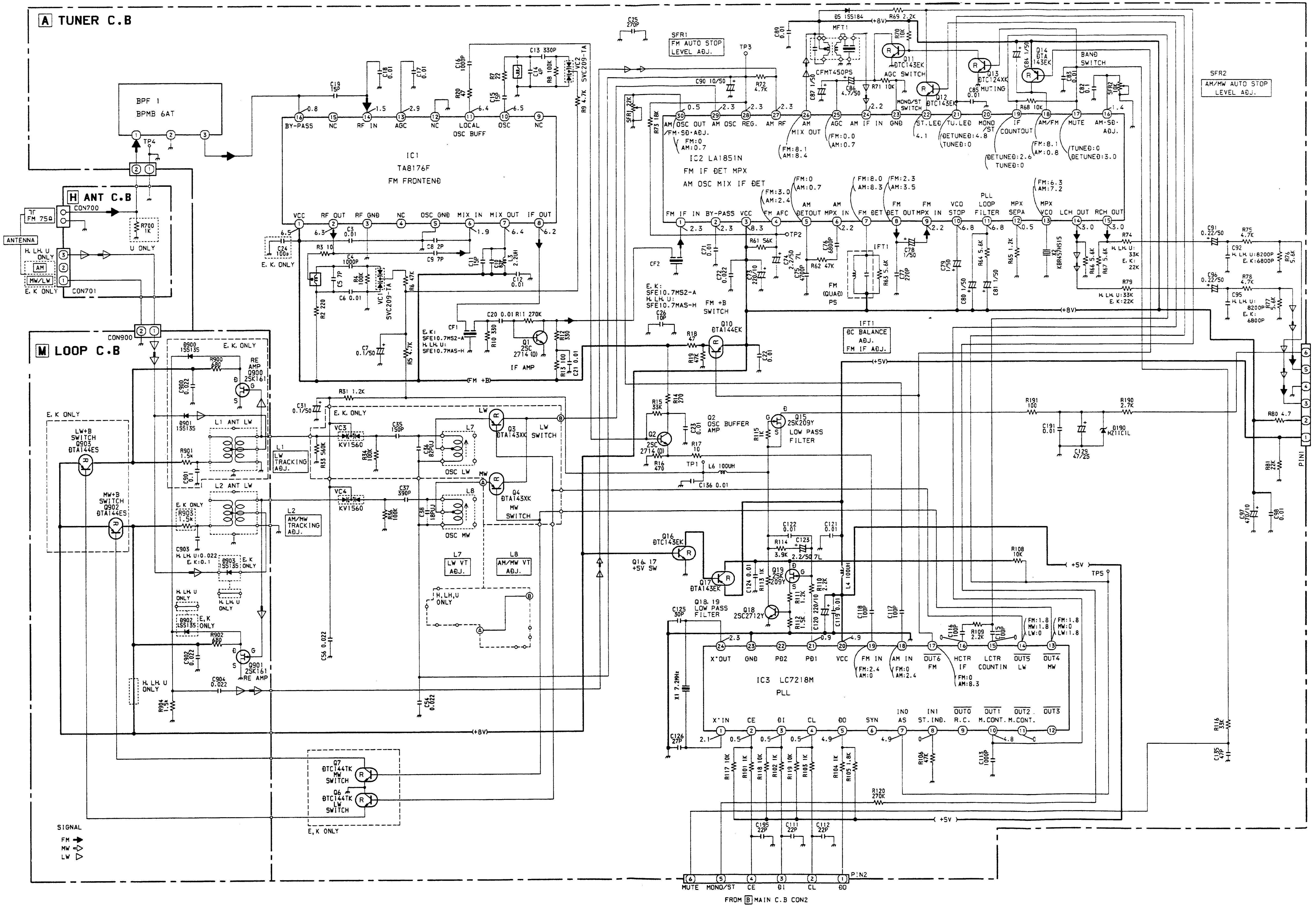
## WIRING – 1 (RDX – 01 : TUNER) 〈H, LH, U, E, K〉


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
K
A TUNER C.B
FROM B MAIN C.B
CON2
CON1
PIN2
PIN1
IC1
IC2
IC3
X1
X2
TP1 (V.T)
TP2
TP3
TP4
TP5
IFT1
MFT1
SFR1
SFR2
CF1
CF2
BPF1
L3
L4
L6
L7
L8
VC1
VC2
VC3
VC4
D5
D190
E,K ONLY
H,LH,U ONLY
(BLK)
(GRN)
RED
BRN
M LOOP C.B
ANTENNA
CON700
75Ω
FM
CON701
LOOP
AM
H ANT C.B
R700
U ONLY
FC700
H,LH,U ONLY
FROM A TUNER C.B
M LOOP C.B
C902
R902
C903
Q901
L2
C904
CON900
E,K ONLY
FROM A TUNER C.B
M LOOP C.B
Q902
L1
C901
R901
R903
D903
D901
R900
D900
Q900
R904
D902
C900

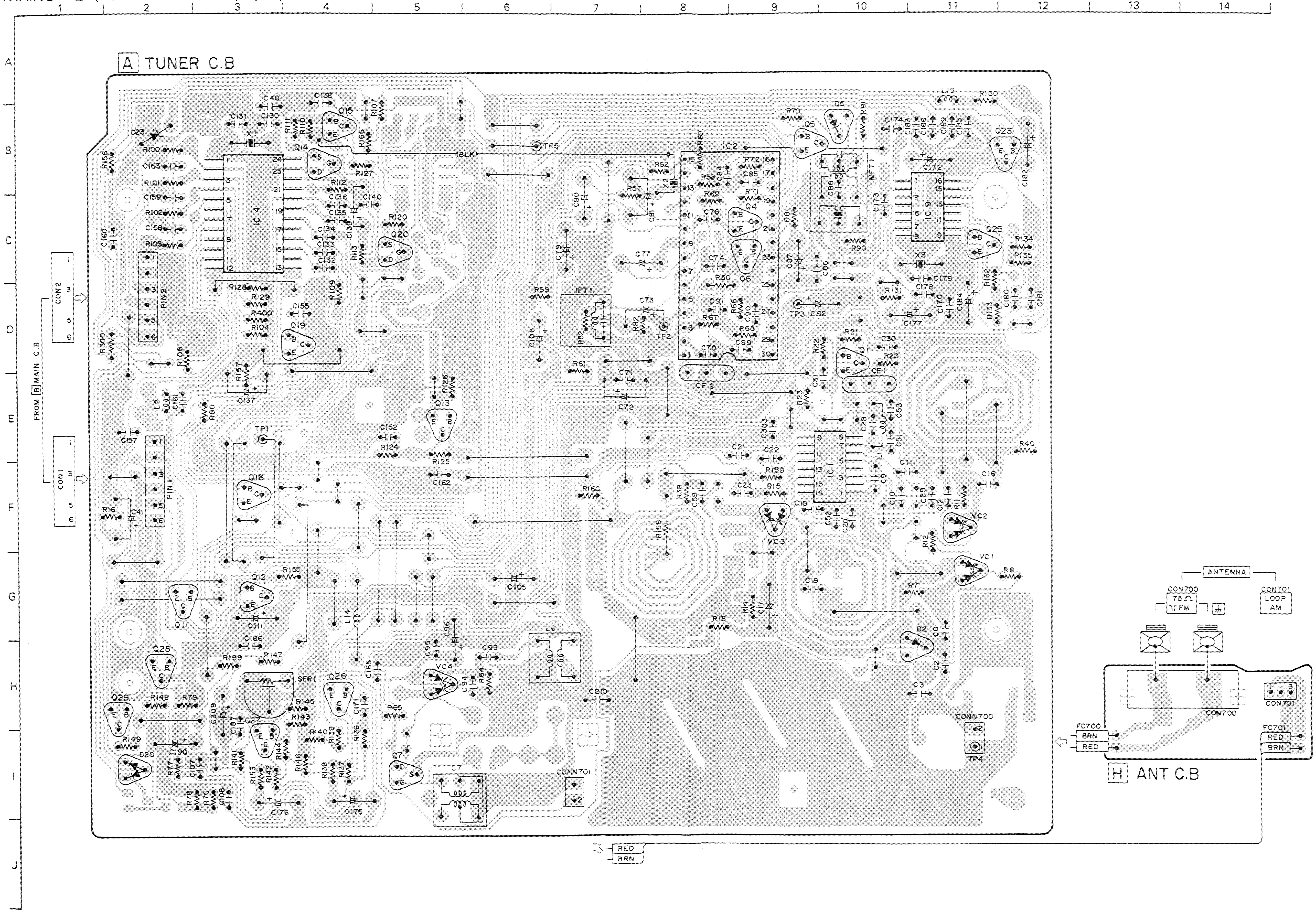
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

（プリント基板内のケミコンの極性表示は⊖表示です。）

# SCHEMATIC DIAGRAM – 1 (RDX – 01 : TUNER) 〈H, LH, U, E, K〉


A TUNER C.B
H ANT C.B
M LOOP C.B
BPF 1
BPMB 6AT
TP4
CON700
CON701
CON900
ANTENNA
FM 75Ω
H, LH, U ONLY
AM
MW/LW
E, K ONLY
U ONLY
R700 1K
IC1
TA8176F
FM FRONTEND
BY-PASS
NC
RF IN
AGC
LOCAL OSC BUFF
OSC
VCC
RF OUT
RF GND
OSC GND
MIX IN
MIX OUT
IF OUT
VC1 SVC209-TA
VC2 SVC209-TA
CF1
Q1 2SC2714 (O) IF AMP
E, K: SFE10.7MS2-A
H, LH, U: SFE10.7MAS-H
Q10 DTA144EK FM +B SWITCH
CF2
IC2 LA1851N
FM IF DET MPX
AM OSC MIX IF DET
AM OSC OUT
AM OSC REG.
AM RF
AM MIX OUT
AGC
AM IF IN
GND
MONO/ST SWITCH
ST.LED
TU.LED
MONO/ST
IF COUNTOUT
AM/FM
MUTE
AM·SD·ADJ.
FM IF IN
AM AFC
AM DETOUT
MPX IN
FM DET
FM DET OUT
MPX IN
VCO STOP
PLL LOOP FILTER
MPX SEPA
MPX VCO
LCH OUT
RCH OUT
SFR1 FM AUTO STOP LEVEL ADJ.
SFR2 AM/MW AUTO STOP LEVEL ADJ.
TP3
TP2
TP1
TP5
MFT1
CFMT450PS
Q11 DTC143EK AGC SWITCH
Q12 DTC143EK
Q13 DTC124XK MUTING
Q14 DTA143EK BAND SWITCH
IFT1
FM (QUAD) PS
IFT1 DC BALANCE ADJ. FM IF ADJ.
Q2 2SC2714 (O) OSC BUFFER AMP
Q15 2SK209Y LOW PASS FILTER
L6 100UH
Q3 DTA143XK LW SWITCH
Q4 DTA143XK MW SWITCH
VC3 KV1560
VC4 KV1560
L1 LW TRACKING ADJ.
L2 AM/MW TRACKING ADJ.
L7 LW VT ADJ.
L8 AM/MW VT ADJ.
OSC LW
OSC MW
L1 ANT LW
L2 ANT LW
Q900 2SK161 RE AMP
Q901 2SK161 RE AMP
Q902 DTA144ES MW+B SWITCH
Q903 DTA144ES LW+B SWITCH
Q7 DTC144TK MW SWITCH
Q6 DTC144TK LW SWITCH
Q16 DTC143EK
Q17 DTA143EK
Q16, 17 +5V SW
Q18, 19 LOW PASS FILTER
Q18 2SC2712Y
Q19 2SK209Y
X1 7.2MHz
IC3 LC7218M
PLL
X'OUT
GND
PD2
PD1
VCC
FM IN
AM IN
OUT6 FM
HCTR IF
LCTR COUNTIN
OUT5 LW
OUT4 MW
X'IN
CE
DI
CL
DO
SYN
INO AS
IN1 ST.IND.
OUT0 R.C.
OUT1 M.CONT.
OUT2 M.CONT.
OUT3
D190 HZ11C1L
PIN1
+13V
LCH
GND
RCH
+8V
+5V
FROM B MAIN C.B CON1
PIN2
MUTE
MONO/ST
CE
DI
CL
DO
FROM B MAIN C.B CON2
(+8V)
(+5V)
FM +B
SIGNAL
FM
MW
LW

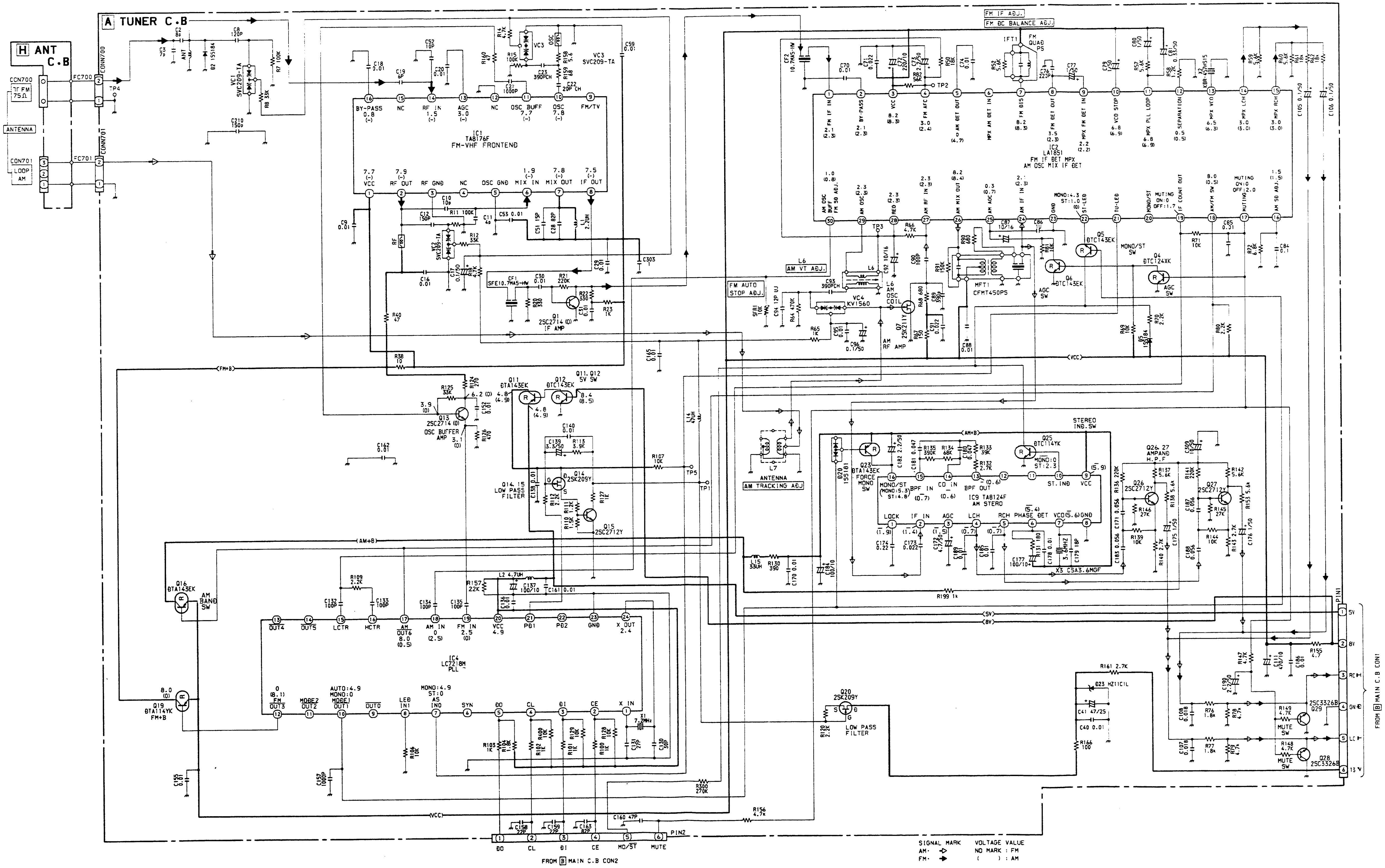
# WIRING – 2 (RDX – 01 : TUNER) (HD)

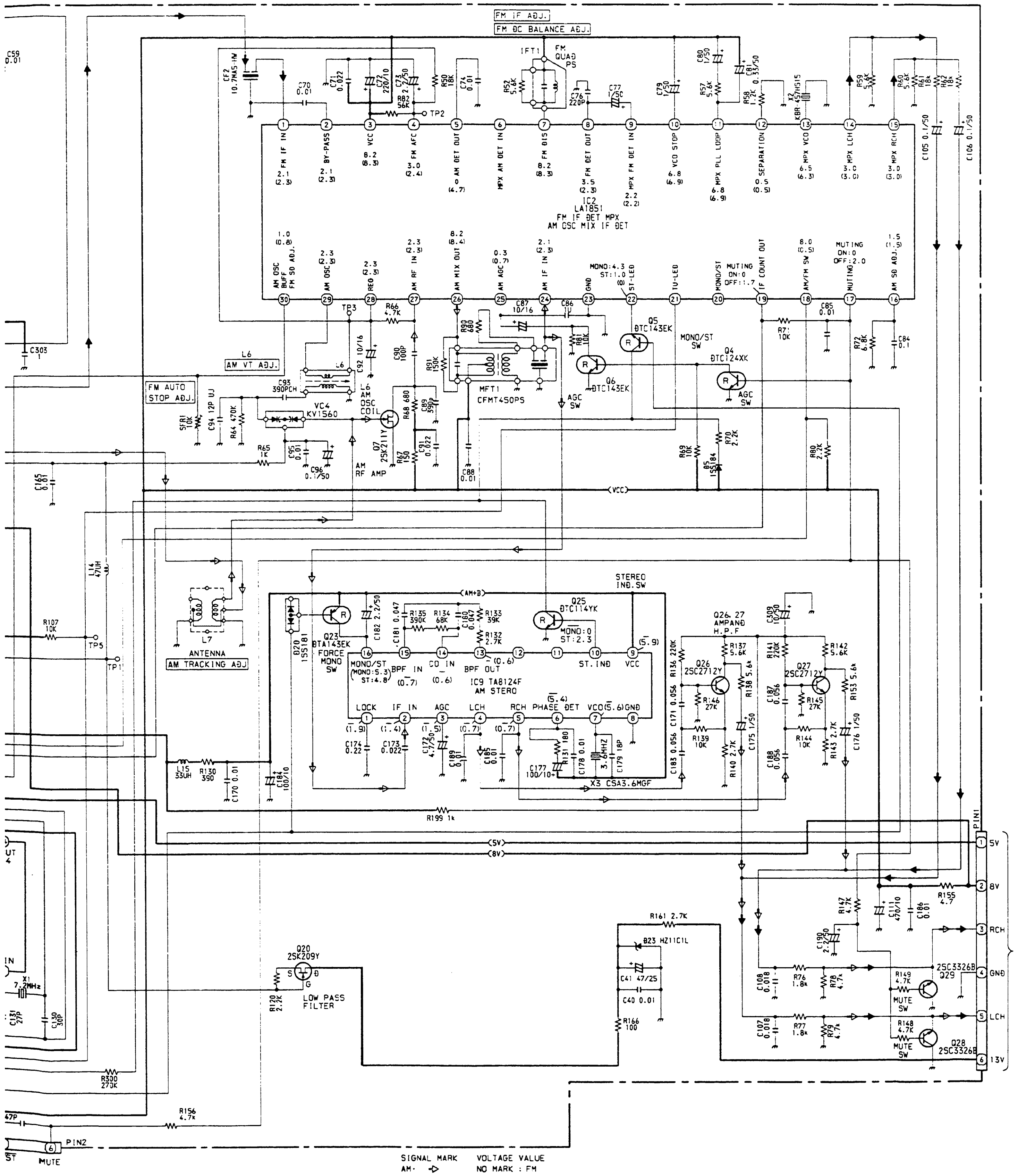

A TUNER C.B
H ANT C.B
FROM B MAIN C.B
CON1
CON2
PIN1
PIN2
IC1
IC2
IC4
IC9
IFT1
MFT1
CF1
CF2
SFR1
L6
L7
VC1
VC2
VC3
VC4
TP1
TP2
TP3
TP4
TP5
(BLK)
ANTENNA
CON700
75Ω
FM
CON701
LOOP
AM
CONN700
CONN701
FC700
FC701
BRN
RED
BRN
RED
RED
BRN

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

(プリント基板内のケミコンの極性表示は⊖表示です。)

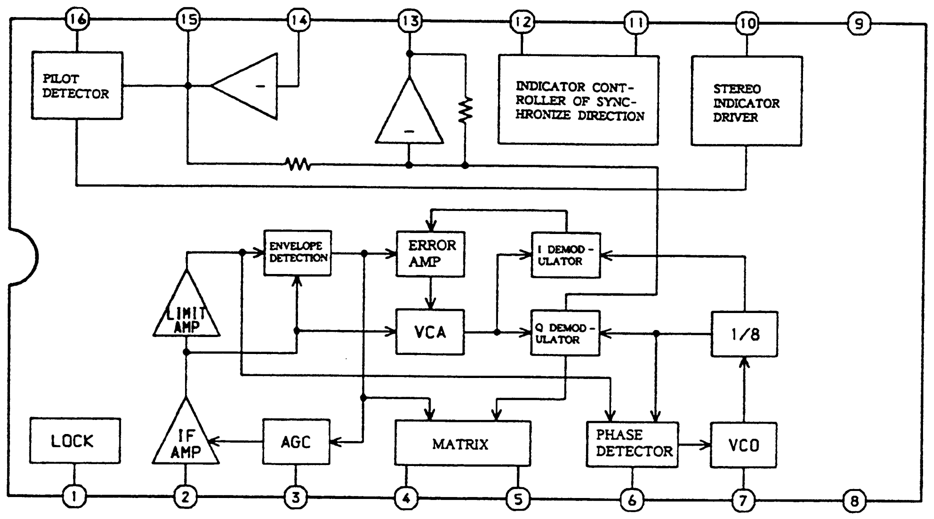
# SCHEMATIC DIAGRAM – 2 (RDX – 01 : TUNER) (HD)


A TUNER C.B
H ANT C.B
CON700
FM 75Ω
ANTENNA
CON701
LOOP AM
FC700
FC701
CONN700
CONN701
TP4
VC1 SVC209-TA
VC2 SVC209-TA
VC3 SVC209-TA
IC1 TA8176F FM-VHF FRONTEND
BY-PASS
NC
RF IN
AGC
OSC BUFF
OSC
FM/TV
VCC
RF OUT
RF GND
OSC GND
MIX IN
MIX OUT
IF OUT
CF1 SFE10.7MA5-HW
Q1 2SC2714 (O) IF AMP
Q11 DTA143EK
Q12 DTC143EK
Q11, Q12 5V SW
Q13 2SC2714 (O) OSC BUFFER AMP
Q14 2SK209Y
Q14, 15 LOW PASS FILTER
Q15 2SC2712Y
Q16 DTA143EK AM BAND SW
Q19 DTA114YK FM+B
IC4 LC7218M PLL
OUT4
OUT5
LCTR
HCTR
AM OUT6
AM IN
FM IN
VCC
PD1
PD2
GND
X OUT
FM OUT3
MODE2 OUT2
MODE1 OUT1
OUT0
LED IN1
AS IND
SYN
DO
CL
DI
CE
X IN
X1 7.2MHz
FM IF ADJ.
FM DC BALANCE ADJ.
IFT1 FM QUAD DS
CF2 10.7MA5-HW
IC2 LA1851 FM IF DET MPX AM OSC MIX IF DET
FM IF IN
BY-PASS
VCC
FM AFC
AM DET OUT
AM IF IN
FM DIS
FM DET OUT
MPX FM DET IN
VCO STOP
MPX PLL LOOP
SEPARATION
MPX VCO
MPX LCH
MPX RCH
AM OSC BUFF
FM SD ADJ.
AM OSC
AM RF IN
AM MIX OUT
AM AGC
ST-LED
TU-LED
MONO/ST
IF COUNT OUT
AM/FM SW
MUTING
AM SD ADJ.
X2 KBR-456HS15
L6 AM VT ADJ.
FM AUTO STOP ADJ.
VC4 KV1560
L6 AM OSC COIL
Q7 2SK211Y AM RF AMP
MFT1 CFMT450PS
Q5 DTC143EK MONO/ST SW
Q6 DTC143EK AGC SW
Q4 DTC124XK AGC SW
L7 ANTENNA
AM TRACKING ADJ.
TP5
TP1
STEREO IND.SW
Q23 DTA143EK FORCE MONO SW
Q25 DTC114YK
IC9 TA8124F AM STEREO
MONO/ST
BPF IN
CO IN
BPF OUT
ST.IND
LOCK
IF IN
AGC
LCH
RCH
PHASE DET
VCO
GND
X3 CSA3.6MGF
Q26, 27 AMPAND H.P.F
Q26 2SC2712Y
Q27 2SC2712Y
Q20 2SK209Y LOW PASS FILTER
D23 HZ11C1L
Q29 2SC3326B MUTE SW
Q28 2SC3326B MUTE SW
PIN1
5V
8V
RCH
GND
LCH
13V
FROM B MAIN C.B CON1
PIN2
DO
CL
DI
CE
MO/ST
MUTE
FROM B MAIN C.B CON2
(FM+B)
(AM+B)
(VCC)
(5V)
(8V)
SIGNAL MARK
AM·
FM·
VOLTAGE VALUE
NO MARK : FM
( ) : AM

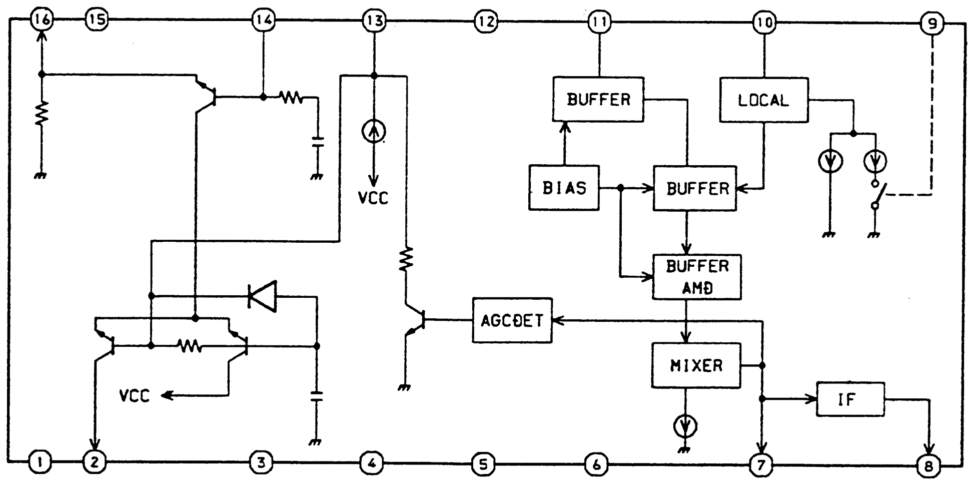

FM IF ADJ.
FM DC BALANCE ADJ.
IC2 LA1851 FM IF DET MPX AM OSC MIX IF DET
IFT1 FM QUAD PS
TP2
TP3
L6 AM VT ADJ.
FM AUTO STOP ADJ.
VC4 KV1560
L6 AM OSC COIL
Q7 2SK211Y AM RF AMP
MFT1 CFMT450PS
Q5 DTC143EK
Q6 DTC143EK
Q4 DTC124XK AGC SW
MONO/ST SW
AGC SW
(VCC)
L7 ANTENNA AM TRACKING ADJ.
TP5
TP1
STEREO IND. SW
(AM+B)
Q25 DTC114YK
Q23 BTA143EK FORCE MONO SW
MONO/ST MONO:0 ST:2.3
IC9 TA8124F AM STEREO
LOCK IF IN AGC LCH RCH PHASE DET VCO GND
BPF IN CO IN BPF OUT ST.IND VCC
X3 CSA3.6MGF
Q26, 27 AMPAND H.P.F
Q26 2SC2712Y
Q27 2SC2712Y
R199 1k
(5V)
(8V)
Q20 2SK209Y LOW PASS FILTER
R161 2.7K
D23 HZ11C1L
C41 47/25
C40 0.01
R166 100
Q29 2SC3326B MUTE SW
Q28 2SC3326B MUTE SW
PIN1
5V
8V
RCH
GND
LCH
13V
FROM (B) MAIN C.B CONT
PIN2
MUTE
SIGNAL MARK
AM·
FM·
VOLTAGE VALUE
NO MARK : FM
( ) : AM

# IC BLOCK DIAGRAM – 1 (RDX – 01)

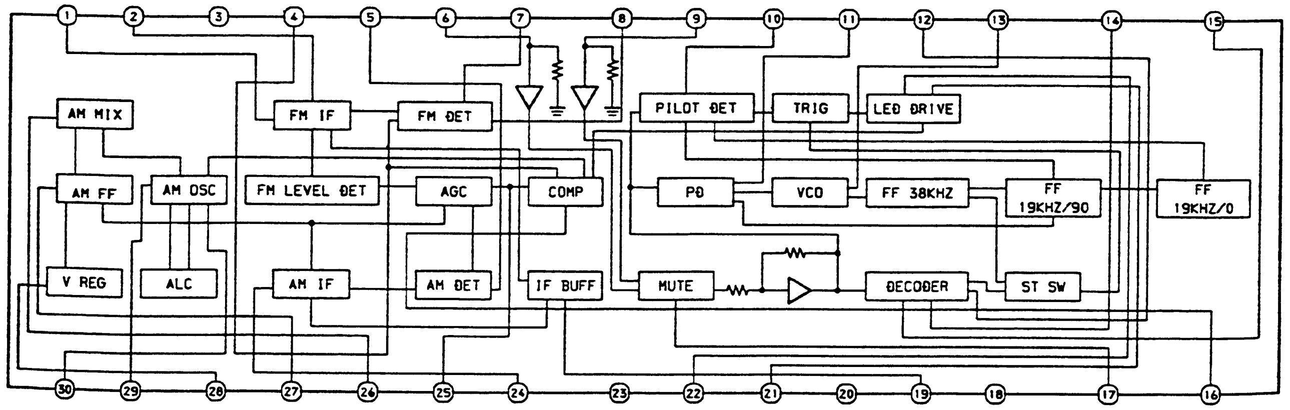
## IC,TA8124


PILOT DETECTOR
INDICATOR CONTROLLER OF SYNCHRONIZE DIRECTION
STEREO INDICATOR DRIVER
ENVELOPE DETECTION
ERROR AMP
I DEMODULATOR
LIMIT AMP
VCA
Q DEMODULATOR
1/8
LOCK
IF AMP
AGC
MATRIX
PHASE DETECTOR
VCO

## IC,TA8176F


BUFFER
LOCAL
VCC
BIAS
BUFFER
BUFFER AMP
AGCDET
MIXER
IF
VCC

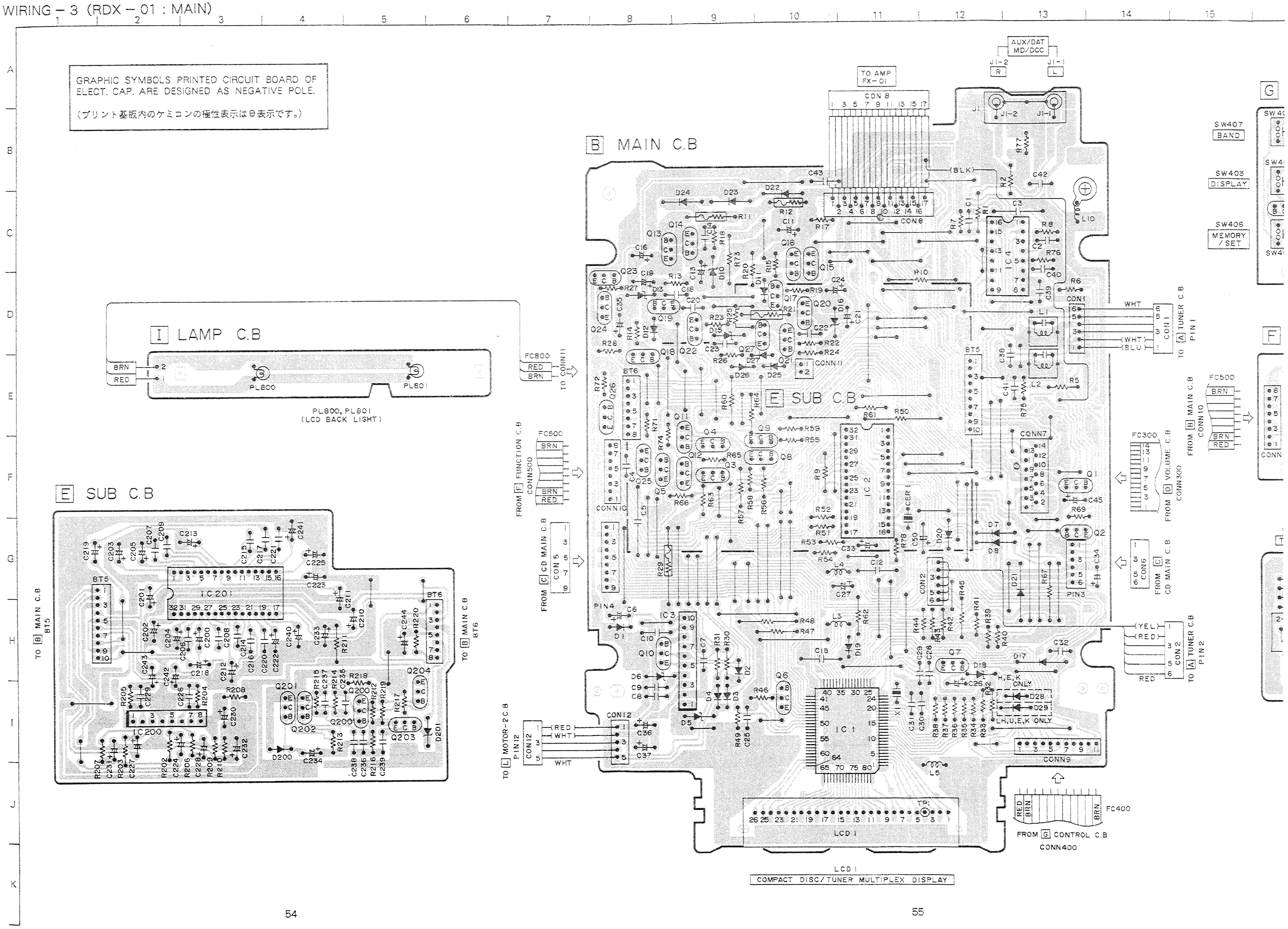
## IC,LA1851N


AM MIX
FM IF
FM DET
PILOT DET
TRIG
LED DRIVE
AM FF
AM OSC
FM LEVEL DET
AGC
COMP
PD
VCO
FF 38KHZ
FF 19KHZ/90
FF 19KHZ/0
V REG
ALC
AM IF
AM DET
IF BUFF
MUTE
DECODER
ST SW

## WIRING – 3 (RDX – 01 : MAIN)

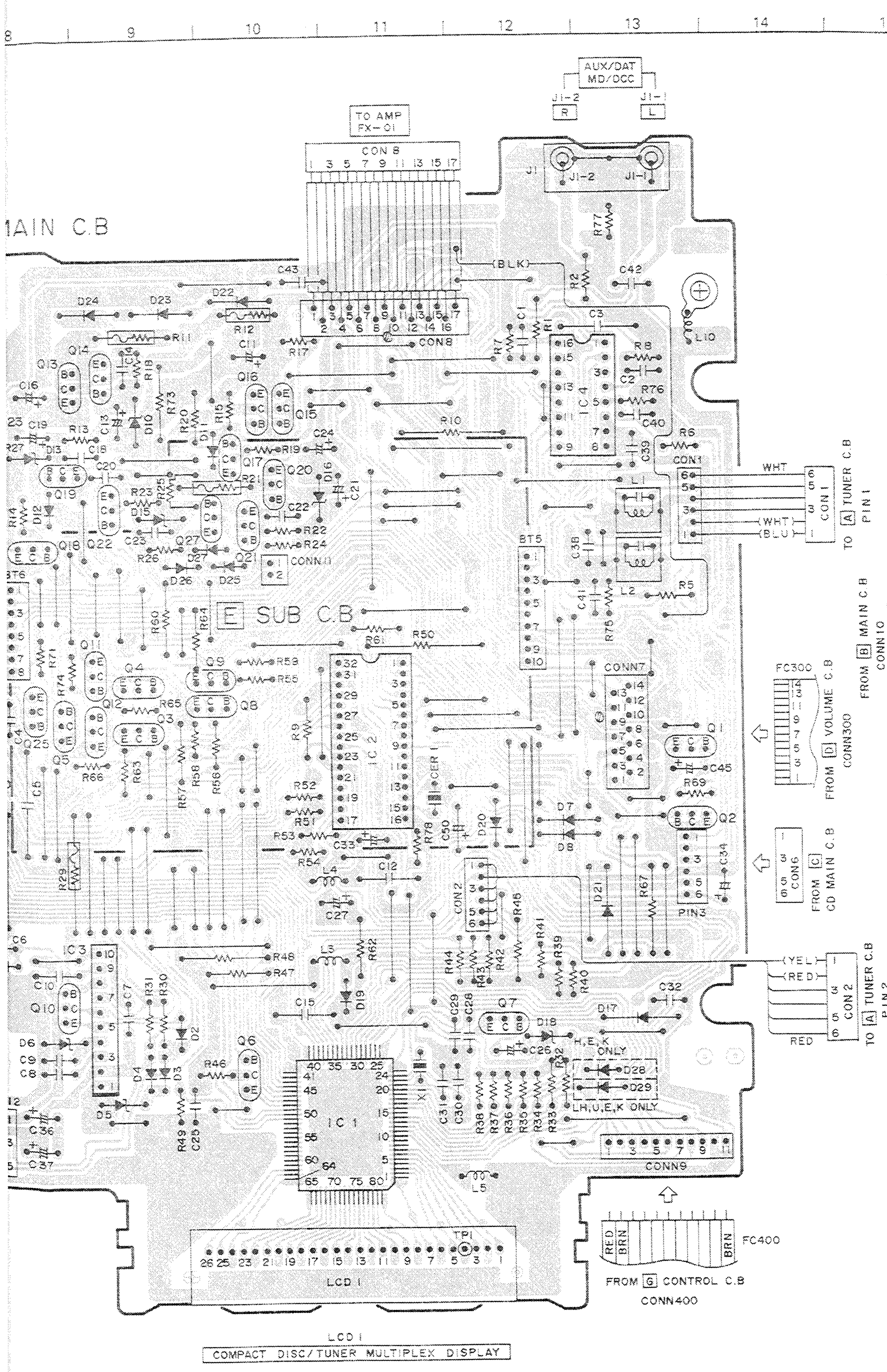
GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

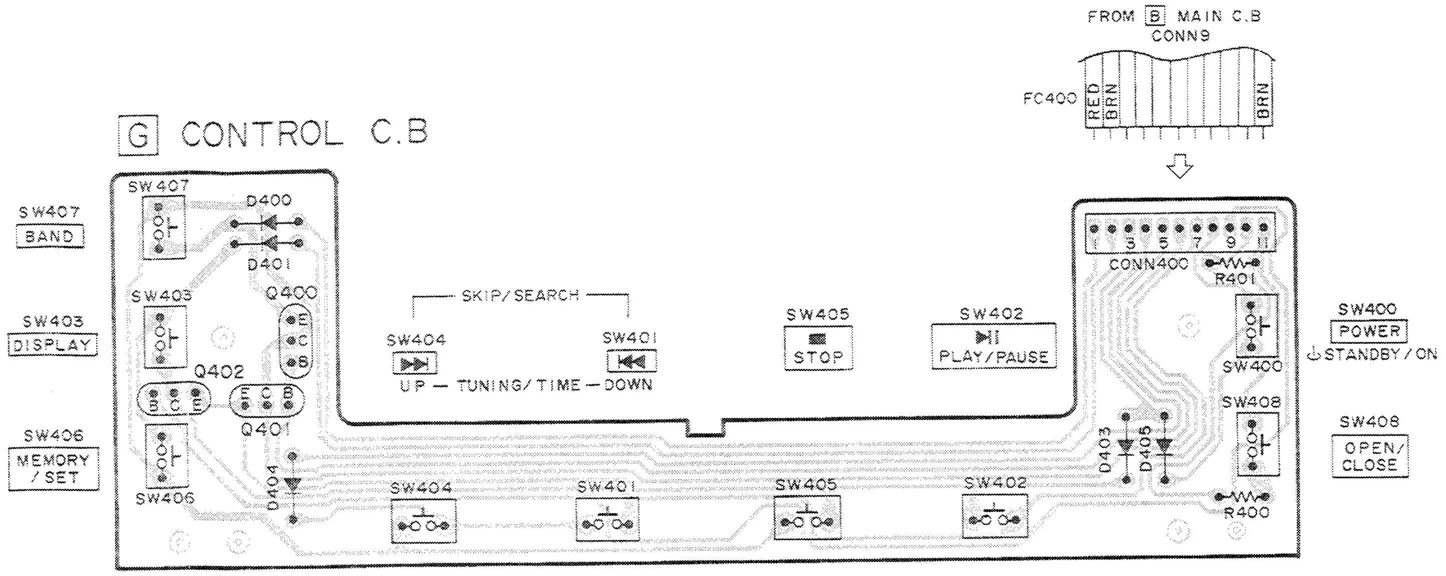
（プリント基板内のケミコンの極性表示は⊖表示です。）

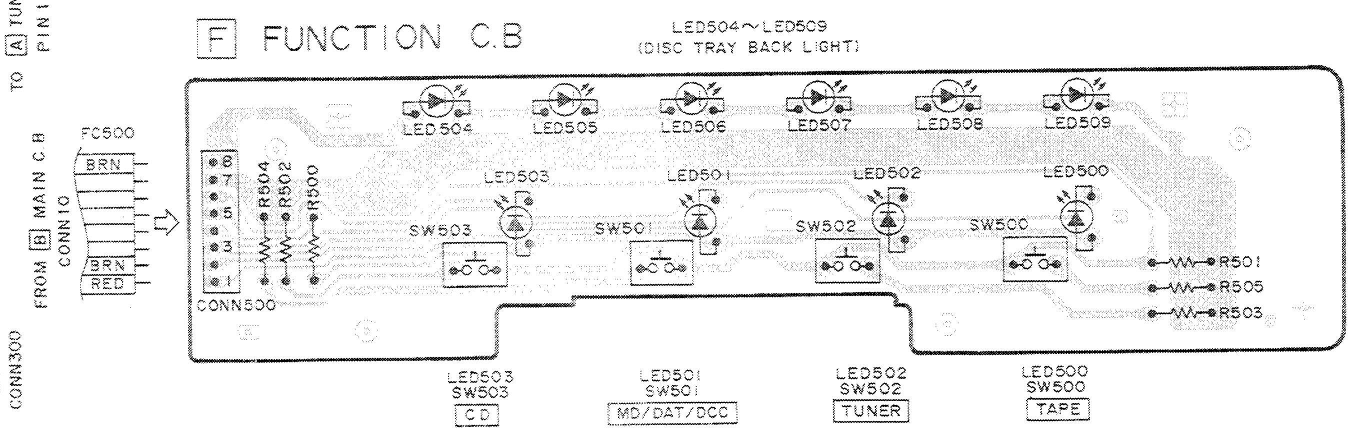


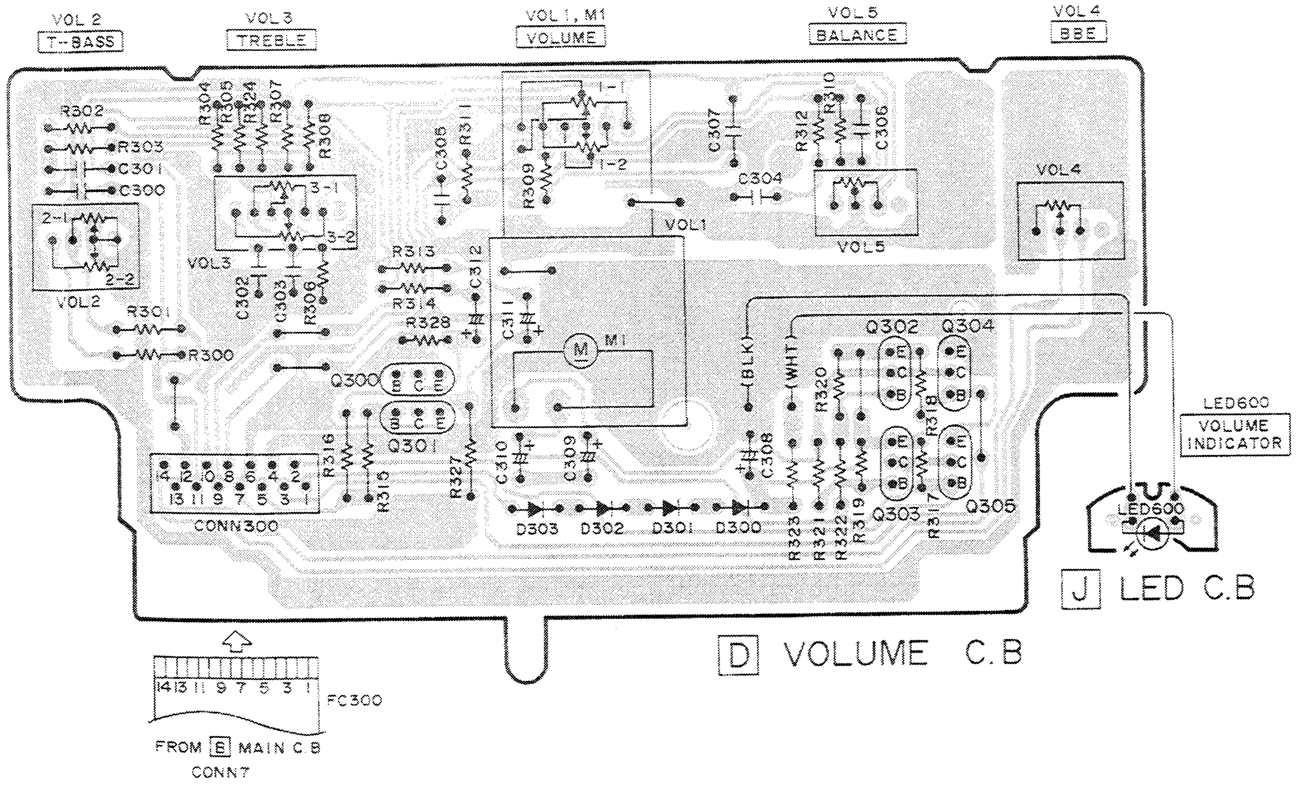
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K
B MAIN C.B
E SUB C.B
I LAMP C.B
PL800
PL801
PL800, PL801
(LCD BACK LIGHT)
BRN
RED
FC800
TO CONN11
FC500
FROM F FUNCTION C.B
CONN500
FROM C CD MAIN C.B
CON5
TO B MAIN C.B
BT5
BT6
IC200
IC201
TO AMP
FX-01
CON8
AUX/DAT
MD/DCC
J1-2
J1-1
R
L
J1
(BLK)
L10
CON1
WHT
(WHT)
(BLU)
TO A TUNER C.B
PIN1
CONN11
CONN10
CONN7
CON2
CON12
CONN9
PIN3
PIN4
IC1
IC2
IC3
IC4
CER1
X1
TP1
LCD1
FC300
FROM D VOLUME C.B
CONN300
CON6
FROM C CD MAIN C.B
(YEL)
(RED)
TO A TUNER C.B
PIN2
H, E, K
ONLY
LH, U, E, K ONLY
(RED)
(WHT)
TO L MOTOR-2 C.B
PIN12
FROM G CONTROL C.B
CONN400
FC400
SW407
BAND
SW403
DISPLAY
SW406
MEMORY
/ SET
G
F
FROM B MAIN C.B
CONN10
FC500

LCD1
COMPACT DISC/TUNER MULTIPLEX DISPLAY

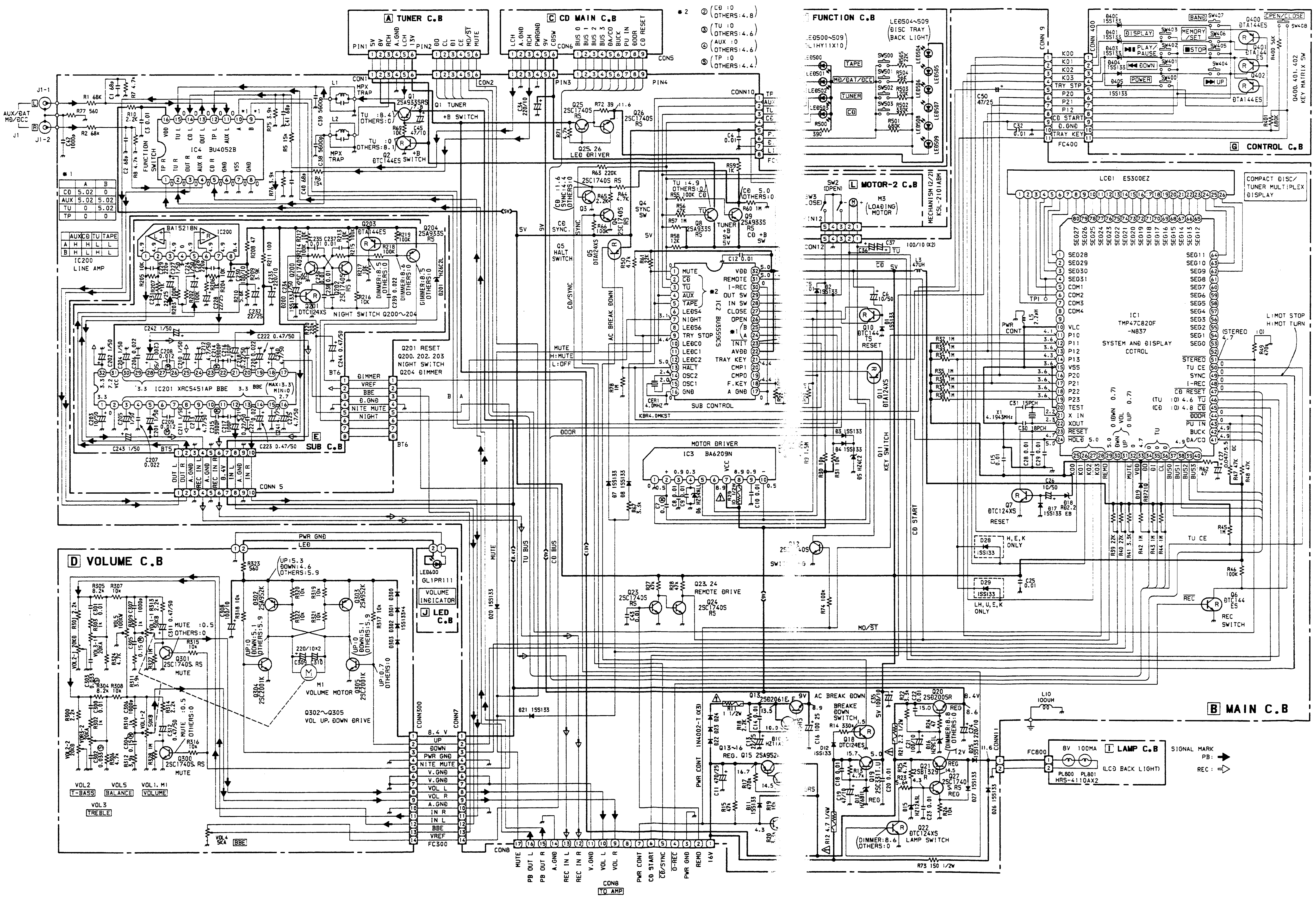

MAIN C.B
E SUB C.B
TO AMP FX-01
CON 8
AUX/DAT MD/DCC
J1-2 R
J1-1 L
IC1
IC2
IC3
IC4
CON1
TO A TUNER C.B PIN1
TO A TUNER C.B PIN2
FC300
FROM D VOLUME C.B CONN300
FROM C CD MAIN C.B
CONN7
CONN9
CON2
CON6
PIN3
FC400
FROM G CONTROL C.B CONN400
LCD1
LCD1
COMPACT DISC/TUNER MULTIPLEX DISPLAY
H,E,K ONLY
LH,U,E,K ONLY


G CONTROL C.B
FROM B MAIN C.B CONN9
FC400
CONN400
SW407 BAND
SW403 DISPLAY
SW406 MEMORY / SET
SKIP/SEARCH
SW404
SW401
UP — TUNING/TIME — DOWN
SW405 STOP
SW402 PLAY/PAUSE
SW400 POWER ⏻STANDBY/ON
SW408 OPEN/ CLOSE

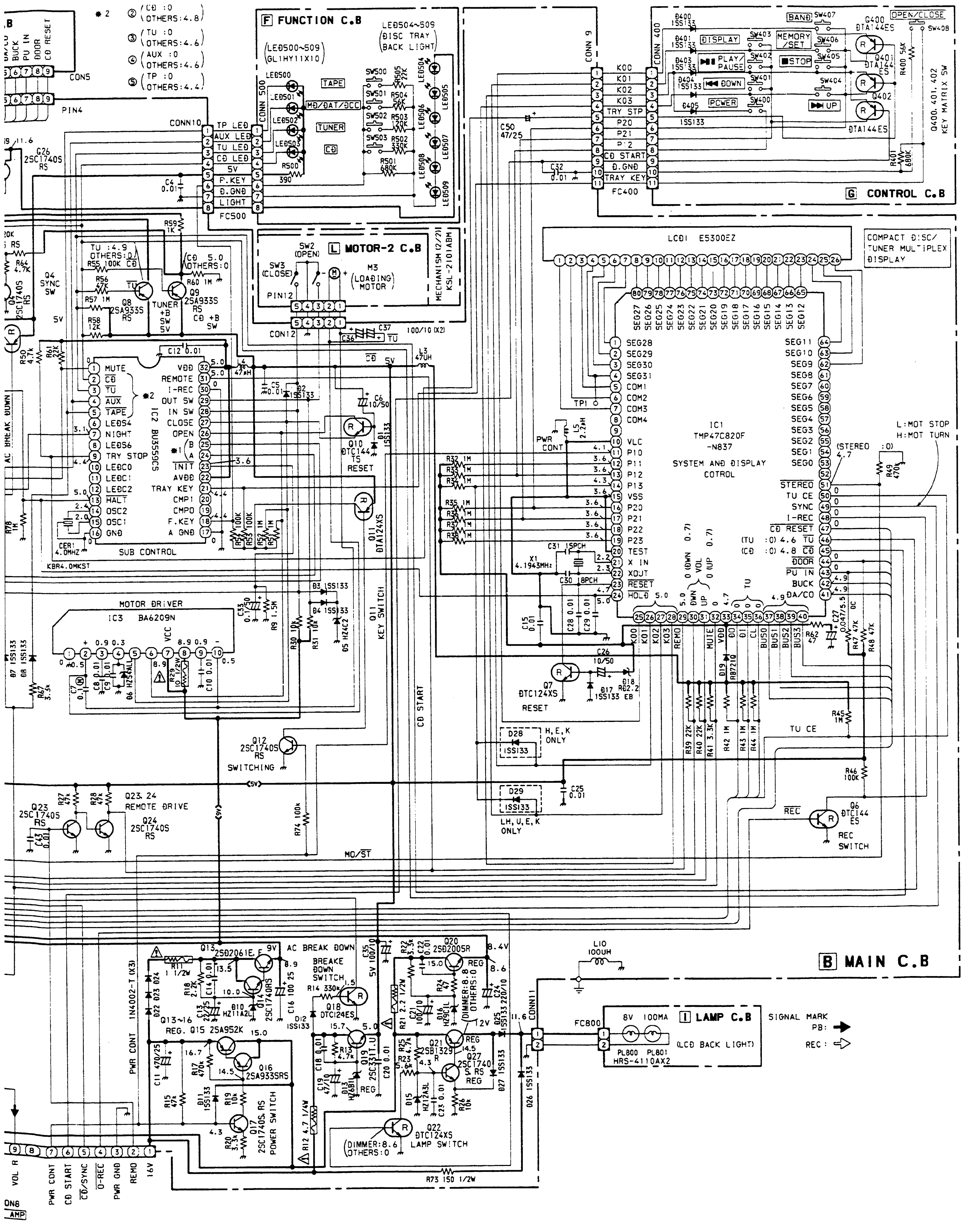

F FUNCTION C.B
LED504~LED509 (DISC TRAY BACK LIGHT)
FC500
FROM B MAIN C.B CONN10
CONN500
LED503 SW503 CD
LED501 SW501 MD/DAT/DCC
LED502 SW502 TUNER
LED500 SW500 TAPE


VOL 2 T-BASS
VOL 3 TREBLE
VOL 1, M1 VOLUME
VOL 5 BALANCE
VOL 4 BBE
CONN300
FC300
FROM E MAIN C.B CONN7
D VOLUME C.B
LED600 VOLUME INDICATOR
J LED C.B

# SCHEMATIC DIAGRAM – 3 (RDX – 01 : MAIN)

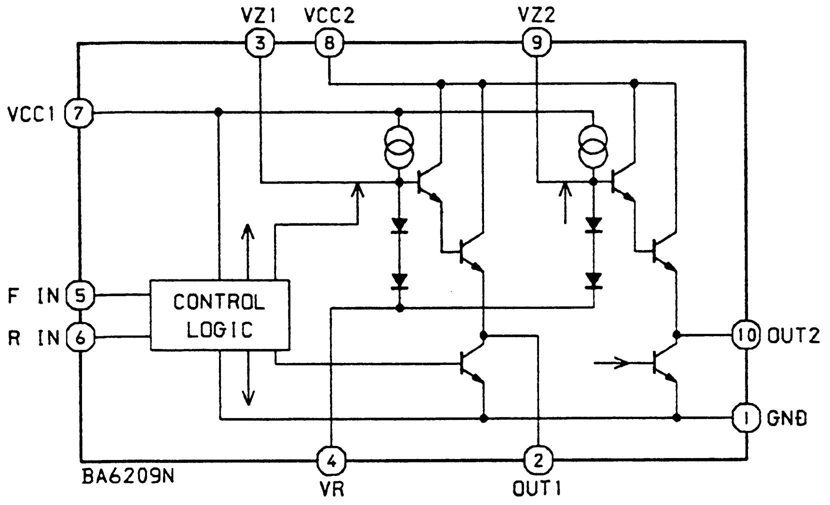


A TUNER C.B
C CD MAIN C.B
FUNCTION C.B
L MOTOR-2 C.B
G CONTROL C.B
E SUB C.B
D VOLUME C.B
J LED C.B
B MAIN C.B
I LAMP C.B
IC4 BU4052B
FUNCTION SWITCH
IC200 LINE AMP
IC201 XRC5451AP BBE
Q1 TUNER +B SWITCH
Q25, 26 LED DRIVER
NIGHT SWITCH Q200~204
Q201 RESET
Q200, 202, 203 NIGHT SWITCH
Q204 DIMMER
IC2 BU5556CS SUB CONTROL
IC3 BA6209N MOTOR DRIVER
IC1 TMP47C820F -N837 SYSTEM AND DISPLAY COTROL
LCD1 ES300EZ
COMPACT DISC/ TUNER MULTIPLEX DISPLAY
M3 LOADING MOTOR
M1 VOLUME MOTOR
Q302~Q305 VOL UP, DOWN DRIVE
Q23, 24 REMOTE DRIVE
Q22 DTC124XS LAMP SWITCH
Q6 DTC144ES REC SWITCH
Q7 DTC124XS RESET
Q11 KEY SWITCH
Q10 DTC144TS RESET
Q5 HALT SWITCH
Q4 SYNC SW
AC BREAK DOWN
VOL2 T-BASS
VOL5 BALANCE
VOL1, M1 VOLUME
VOL3 TREBLE
VOL4 5KA BBE
CONN5
CONN8 TO AMP
FC300
FC800
FC400
LED600 GL1PR111 VOLUME INDICATOR
PL800 PL801 HRS-4110AX2 (LCD BACK LIGHT)
SIGNAL MARK PB: ➡ REC: ⇨
J1-1 J1-2 AUX/DAT MD/DCC
*2 ② (CD :0 OTHERS:4.8) ③ (TU :0 OTHERS:4.6) ④ (AUX :0 OTHERS:4.6) ⑤ (TP :0 OTHERS:4.4)
L:MOT STOP H:MOT TURN


F FUNCTION C.B
G CONTROL C.B
L MOTOR-2 C.B
B MAIN C.B
I LAMP C.B
LCD1 E5300EZ
COMPACT DISC/TUNER MULTIPLEX DISPLAY
IC1 TMP47C820F -N837 SYSTEM AND DISPLAY COTROL
IC2 BU5555GS SUB CONTROL
MOTOR DRIVER IC3 BA6209N
Q400,401,402 KEY MATRIX SW
MECHANISM (2/2) KSL-2101ABM
M3 (LOADING) MOTOR
Q12 2SC1740S RS SWITCHING
Q23,24 REMOTE DRIVE
Q6 DTC144ES REC SWITCH
Q13 2SD2061E
BREAKE DOWN SWITCH
AC BREAK DOWN
Q17 2SC1740S RS POWER SWITCH
Q22 DTC124XS LAMP SWITCH
PL800 PL801 HRS-4110AX2 (LCD BACK LIGHT)
8V 100MA
SIGNAL MARK PB: ➔ REC: ⇨
L:MOT STOP H:MOT TURN

# IC BLOCK DIAGRAM – 2 (RDX – 01)

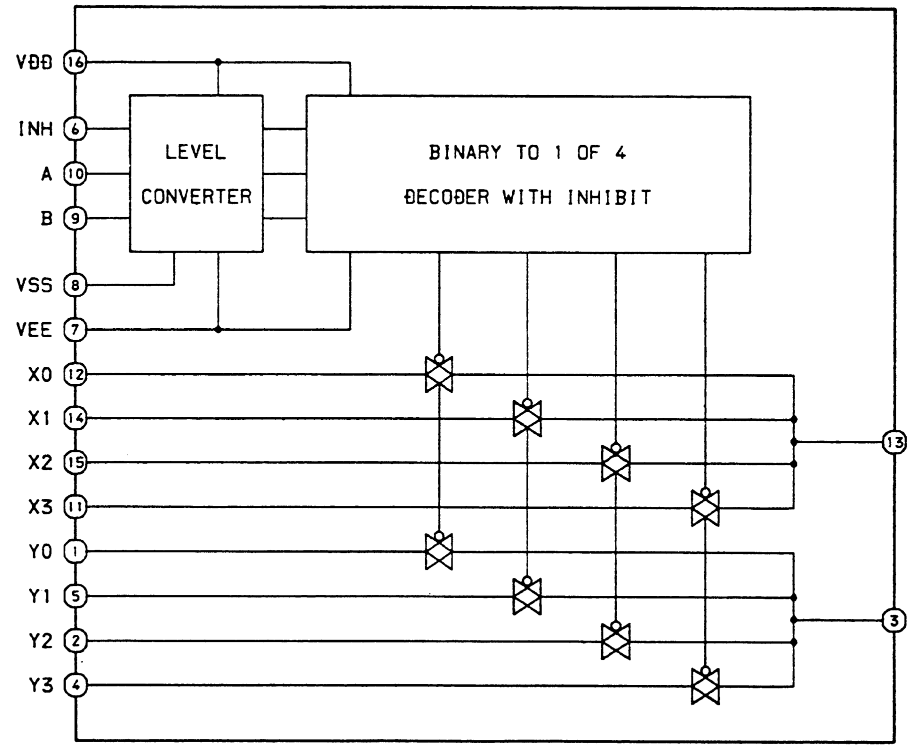
## IC,BA6209


VZ1
VCC2
VZ2
VCC1
F IN
R IN
CONTROL LOGIC
OUT2
GND
BA6209N
VR
OUT1

### TRUTH TABLE

| FIN | RIN | VOUT1 | VOUT2 | NOTES |
|---|---|---|---|---|
| L | L | L | L | BRAKE |
| H | L | H | L | CW |
| L | H | L | H | CCW |
| H | H | L | L | BRAKE |

## IC,BU4052B


VDD 16
INH 6
A 10
B 9
VSS 8
VEE 7
X0 12
X1 14
X2 15
X3 11
Y0 1
Y1 5
Y2 2
Y3 4
LEVEL CONVERTER
BINARY TO 1 OF 4 DECODER WITH INHIBIT
13 X
3 Y

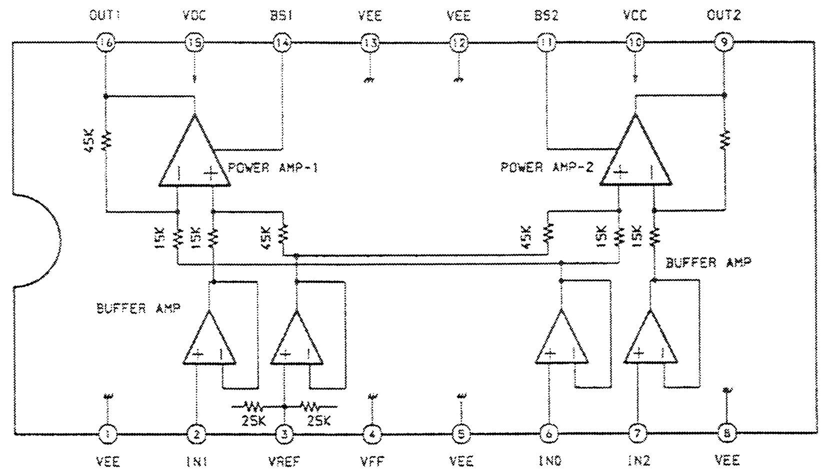
### TRUTH TABLE

| INHIBIT | A | B | ON SWITCH |
|---|---|---|---|
| L | L | L | X0 Y0 |
| L | H | L | X1 Y1 |
| L | L | H | X2 Y2 |
| L | H | H | X3 Y3 |
| H | X | X | NONE |

X:DON'T CARE.

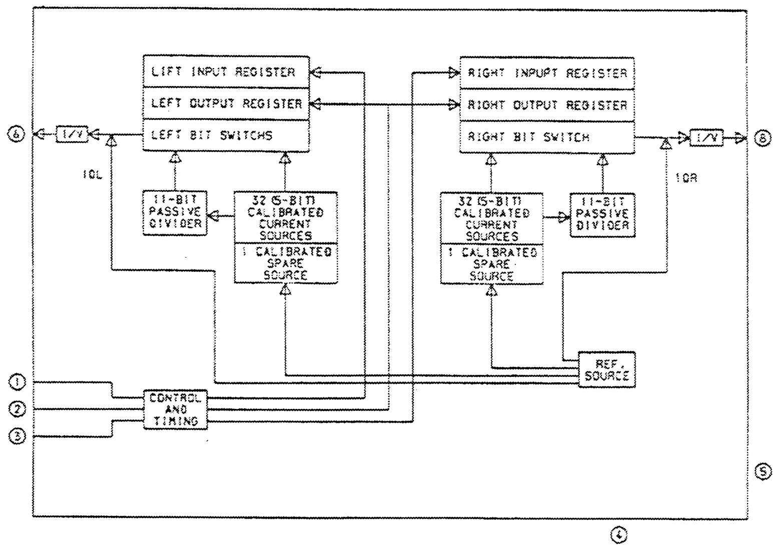
# IC BLOCK DIAGRAM – 3 (RDX – 01)

## IC,TA8102P



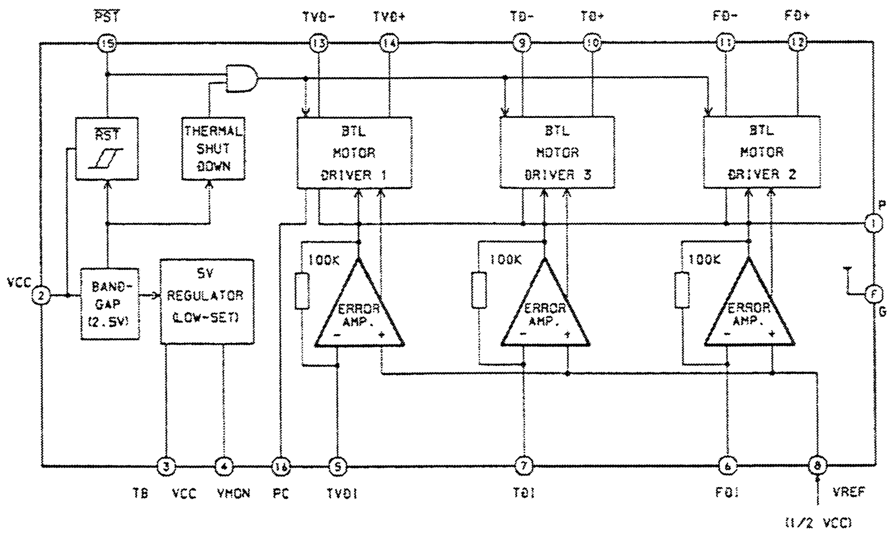
OUT1
VCC
BS1
VEE
VEE
BS2
VCC
OUT2
16
15
14
13
12
11
10
9
45K
POWER AMP-1
POWER AMP-2
15K
15K
45K
45K
15K
15K
BUFFER AMP
BUFFER AMP
25K
25K
1
2
3
4
5
6
7
8
VEE
IN1
VREF
VEE
VEE
IN0
IN2
VEE

## IC,TDA1311T



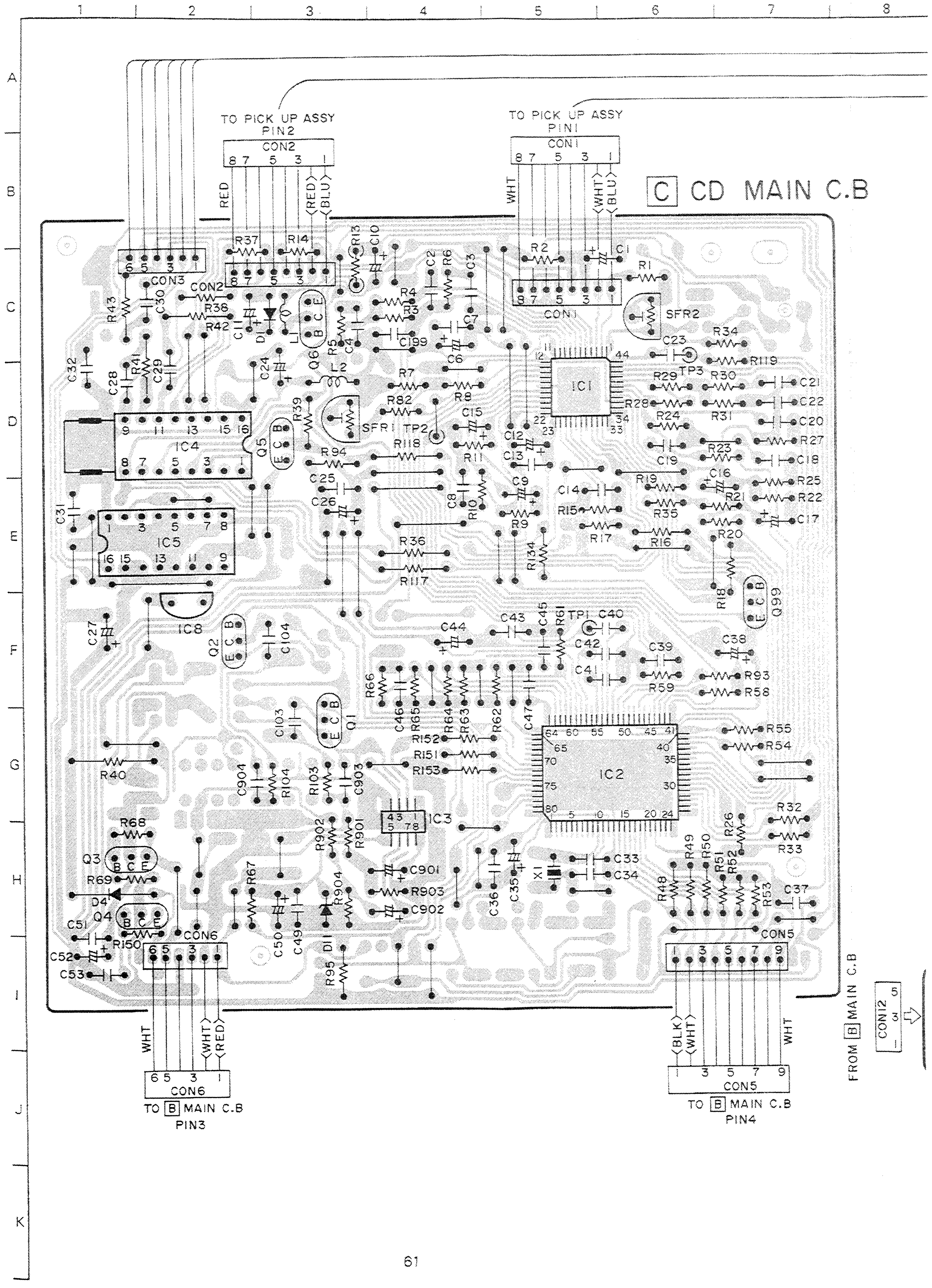
LEFT INPUT REGISTER
LEFT OUTPUT REGISTER
LEFT BIT SWITCHS
RIGHT INPUPT REGISTER
RIGHT OUTPUT REGISTER
RIGHT BIT SWITCH
6
I/V
IOL
I/V
8
IOR
11-BIT PASSIVE DIVIDER
32 (5-BIT) CALIBRATED CURRENT SOURCES
1 CALIBRATED SPARE SOURCE
32 (5-BIT) CALIBRATED CURRENT SOURCES
1 CALIBRATED SPARE SOURCE
11-BIT PASSIVE DIVIDER
REF. SOURCE
1
2
3
CONTROL AND TIMING
5
4

## IC,AN8377



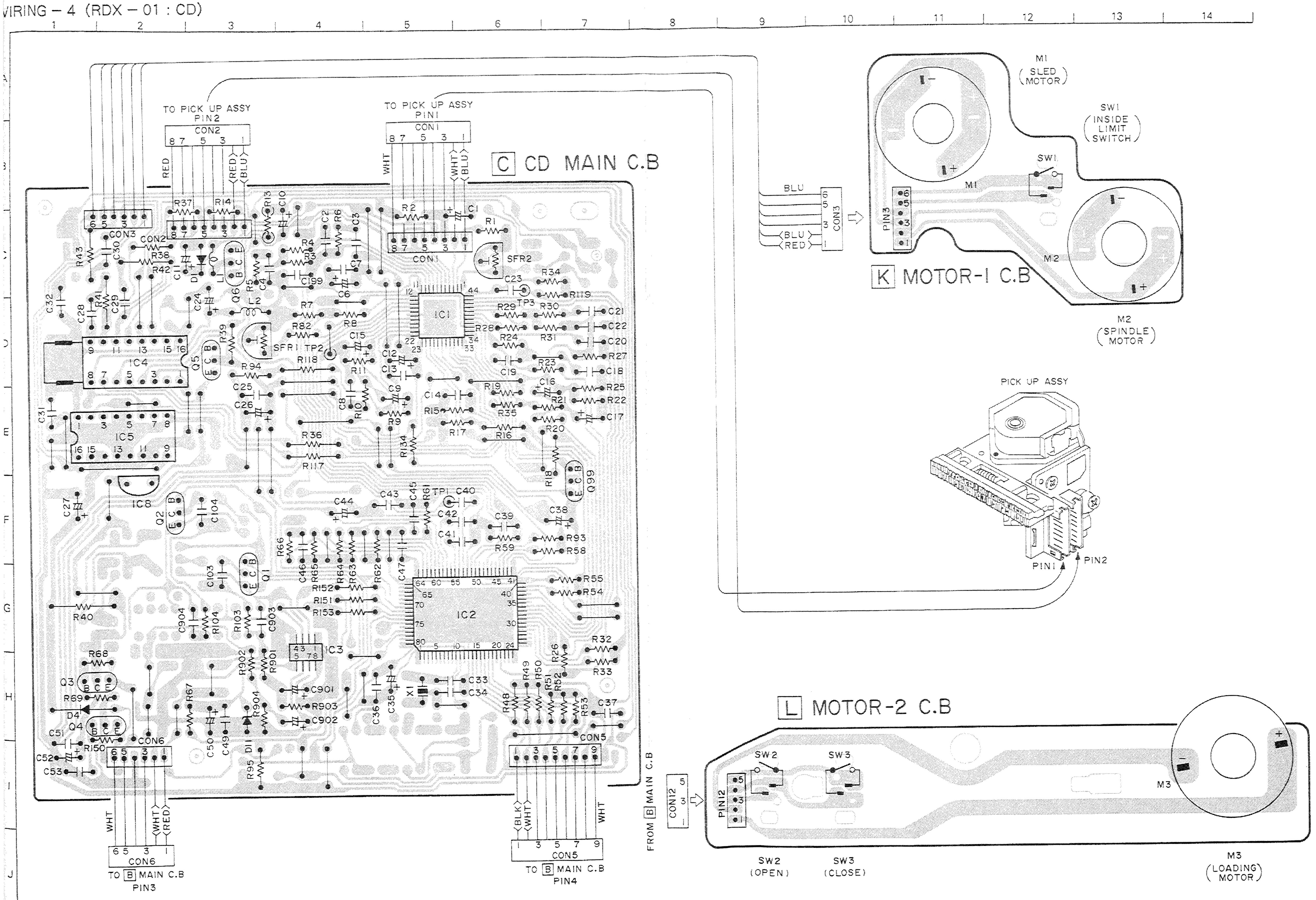
RST
TVD-
TVD+
TD-
TD+
FD-
FD+
15
13
14
9
10
11
12
RST
THERMAL SHUT DOWN
BTL MOTOR DRIVER 1
BTL MOTOR DRIVER 3
BTL MOTOR DRIVER 2
PVCC
1
VCC
2
BAND-GAP (2.5V)
5V REGULATOR (LOW-SET)
100K
ERROR AMP.
100K
ERROR AMP.
100K
ERROR AMP.
F
GND
3
4
16
5
7
6
8
TB
VCC
VMON
PC
TVDI
TDI
FDI
VREF
(1/2 VCC)

# WIRING – 4 (RDX – 01 : CD)



1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
TO PICK UP ASSY PIN2
CON2
8 7 5 3 1
RED
(RED)
(BLU)
TO PICK UP ASSY PIN1
CON1
8 7 5 3 1
WHT
(WHT)
(BLU)
C CD MAIN C.B
CON3
R37
R14
R13
C10
C2
R6
C3
R2
C1
R1
SFR2
R43
C30
R36
R42
C11
D1
L1
Q6
R4
R3
R5
C4
C199
C7
C6
IC1
44
12
22
23
34
33
C23
TP3
R34
R119
R29
R30
C21
R28
C22
R24
R31
C20
C32
C28
R41
C29
C24
L2
R7
R82
R8
SFR1
TP2
C15
C12
C13
R23
R27
C18
C19
C16
R25
R19
R21
R22
IC4
Q5
R39
R94
R118
R11
C14
R15
R35
C17
C25
C26
C8
R10
C9
R9
R17
R16
R20
C31
IC5
R134
R117
R36
R18
Q99
C27
IC8
Q2
C104
C44
C43
C45
R61
TP1
C40
C42
C41
C39
R59
C38
R93
R58
R66
C46
R65
R64
R63
R62
C47
C103
Q1
R152
R151
R153
IC2
64 60 55 50 45 41
65
70
75
80
5 10 15 20 24
40
35
30
R55
R54
R40
C904
R104
R103
C903
IC3
R32
R33
R68
Q3
R69
D4
Q4
C51
C52
C53
R150
CON6
R67
R902
R901
C901
R904
R903
C902
C50
C49
D11
R95
C36
C35
X1
C33
C34
R48
R49
R50
R51
R52
R26
R53
C37
CON5
1 3 5 7 9
WHT
(WHT)
(RED)
6 5 3 1
CON6
TO B MAIN C.B PIN3
(BLK)
(WHT)
WHT
1 3 5 7 9
CON5
TO B MAIN C.B PIN4
FROM B MAIN C.B
CON12
5
3
1

## WIRING – 4 (RDX – 01 : CD)


1
2
3
4
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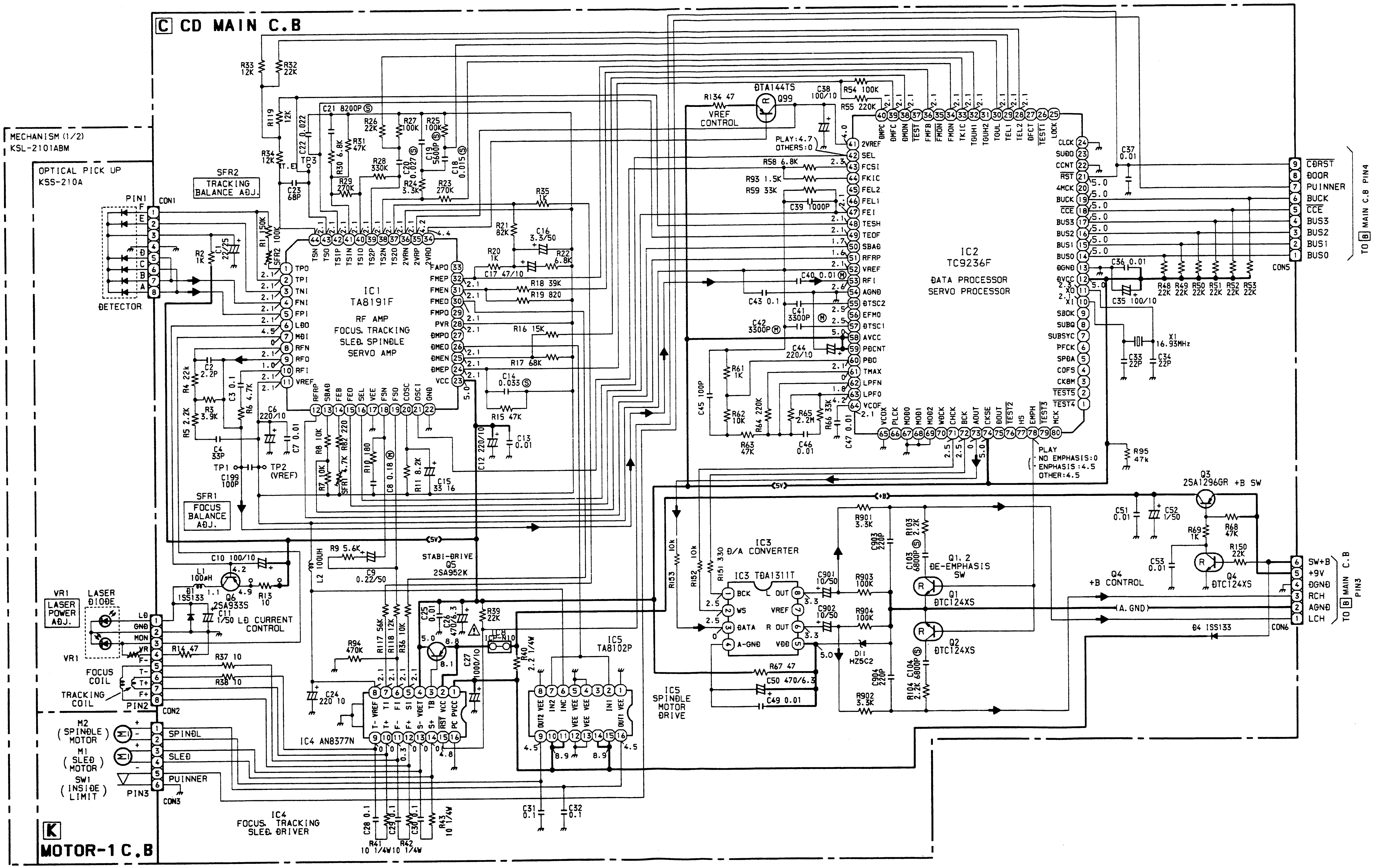
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
K
C CD MAIN C.B
TO PICK UP ASSY
PIN2
CON2
8 7 5 3 1
RED
(RED)
(BLU)
TO PICK UP ASSY
PIN1
CON1
8 7 5 3 1
WHT
(WHT)
(BLU)
CON3
6 5 3 1
IC1
IC2
IC3
IC4
IC5
IC8
SFR1
SFR2
TP1
TP2
TP3
X1
Q1
Q2
Q3
Q4
Q5
Q6
Q99
D1
D4
L1
L2
CON6
6 5 3 1
WHT
(WHT)
(RED)
TO B MAIN C.B
PIN3
CON5
1 3 5 7 9
(BLK)
(WHT)
WHT
TO B MAIN C.B
PIN4
FROM B MAIN C.B
CON12
5
3
1
PIN12
BLU
(BLU)
(RED)
CON3
6 5 3 1
PIN3
K MOTOR-1 C.B
M1
(SLED MOTOR)
SW1
(INSIDE LIMIT SWITCH)
M2
(SPINDLE MOTOR)
PICK UP ASSY
PIN1
PIN2
L MOTOR-2 C.B
SW2
SW3
M3
SW2
(OPEN)
SW3
(CLOSE)
M3
(LOADING MOTOR)

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.

（プリント基板内のケミコンの極性表示は⊖表示です。）

## SCHEMATIC DIAGRAM – 4 (RDX – 01 : CD)


C CD MAIN C.B
MECHANISM (1/2)
KSL-2101ABM
OPTICAL PICK UP
KSS-210A
DETECTOR
PIN1
CON1
SFR2
TRACKING BALANCE ADJ.
SFR1
FOCUS BALANCE ADJ.
IC1
TA8191F
RF AMP
FOCUS, TRACKING
SLED, SPINDLE
SERVO AMP
IC2
TC9236F
DATA PROCESSOR
SERVO PROCESSOR
VREF CONTROL
DTA144TS
Q99
PLAY:4.7
OTHERS:0
X1
16.93MHz
PLAY
NO EMPHASIS:0
ENPHASIS:4.5
OTHER:4.5
Q3
2SA1296GR +B SW
IC3
D/A CONVERTER
IC3 TDA1311T
Q1, 2
DE-EMPHASIS SW
Q1
DTC124XS
Q2
DTC124XS
Q4
+B CONTROL
Q4
DTC124XS
D4 1SS133
D11
HZ5C2
CON5
CDRST
DOOR
PUINNER
BUCK
CCE
BUS3
BUS2
BUS1
BUS0
TO B MAIN C.B PIN4
CON6
SW+B
+9V
DGND
RCH
AGND
LCH
TO B MAIN C.B PIN3
(A. GND)
VR1
LASER POWER ADJ.
LASER DIODE
LD
GND
MON
VR
FOCUS COIL
TRACKING COIL
PIN2
CON2
L1
100μH
D1
1SS133
Q6
2SA933S
LD CURRENT CONTROL
STABI-DRIVE
Q5
2SA952K
IC4 AN8377N
IC4
FOCUS, TRACKING
SLED, DRIVER
IC5
TA8102P
IC5
SPINDLE MOTOR DRIVE
ICP-N10
M2
(SPINDLE) MOTOR
M1
(SLED) MOTOR
SW1
(INSIDE) LIMIT
PIN3
CON3
SPINDL
SLED
PUINNER
K
MOTOR-1 C.B
TP1
TP2 (VREF)
TP3
(5V)
(+B)

# IC, DESCRIPTION (RDX – 01)

## IC,TC9236F

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>$\overline{\mathrm{TEST4}}$</td><td>I</td><td>Test terminal. Normally "H" or open. (Not used.)</td></tr>
<tr><td>2</td><td>$\overline{\mathrm{TEST5}}$</td><td>I</td><td>Test terminal. Normally "H" or open. (Not used.)</td></tr>
<tr><td>3</td><td>CK8M</td><td>O</td><td>8M clock output terminal. (Not used.)</td></tr>
<tr><td>4</td><td>COFS</td><td>O</td><td>Correction system frame frequency signal output terminal. 7.35kHz (Not used.)</td></tr>
<tr><td>5</td><td>SPDA</td><td>O</td><td>Processor status signal output terminal.<br>Correction/discrimination data, memory buffer capacity, etc. (Not used.)</td></tr>
<tr><td>6</td><td>PFCK</td><td>O</td><td>Playback system frame frequency signal output terminal. 7.35kHz (Not used.)</td></tr>
<tr><td>7</td><td>SUBSYC</td><td>O</td><td>Subcode sync signal output terminal. (Not used.)</td></tr>
<tr><td>8</td><td>SUBQ</td><td>O</td><td>Subcode Q data output terminal. (Not used.)</td></tr>
<tr><td>9</td><td>SBOK</td><td>O</td><td>Subcode Q data CRC check data output terminal. OK when "H". (Not used.)</td></tr>
<tr><td>10</td><td>XI</td><td>I</td><td rowspan="2">Crystal oscillator connection terminal.</td></tr>
<tr><td>11</td><td>XO</td><td>O</td></tr>
<tr><td>12</td><td>DVCC</td><td>—</td><td>Digital power voltage terminal. (+5V)</td></tr>
<tr><td>13</td><td>DGND</td><td>—</td><td>Digital GND terminal.</td></tr>
<tr><td>14<br>≀<br>17</td><td>BUS0<br>≀<br>BUS3</td><td>I/O</td><td>Command and data send/receive I/O terminal.</td></tr>
<tr><td>18</td><td>$\overline{\mathrm{CCE}}$</td><td>I</td><td>Chip enable signal input terminal for command and data send/recieve.<br>Bus line active when "L".</td></tr>
<tr><td>19</td><td>BUCK</td><td>I</td><td>Command and data send/receive clock input terminal.</td></tr>
<tr><td>20</td><td>4MCK</td><td>O</td><td>4M clock output terminal. 4.2336MHz (Not used.)</td></tr>
<tr><td>21</td><td>$\overline{\mathrm{RST}}$</td><td>I</td><td>Reset input terminal. Internal system reset when "L".</td></tr>
<tr><td>22</td><td>CCNT</td><td>I</td><td>Subcode Q data control bit update inhibition signal input terminal.<br>Update inhibitted when "H". (GND)</td></tr>
<tr><td>23</td><td>SUDO</td><td>O</td><td>Subcode P - W output terminal. (Not used.)</td></tr>
<tr><td>24</td><td>CLCK</td><td>I</td><td>Subcode P - W data read-out clock input terminal.</td></tr>
<tr><td>25</td><td>LOCK</td><td>O</td><td>Lock status output terminal. "L" when sync pattern siganal in EFM signal is not detected within 17 ms in runaway detection. (Not used.)</td></tr>
<tr><td>26</td><td>$\overline{\mathrm{TEST1}}$</td><td>I</td><td>Test terminal. Normally "H" or open. (Not used.)</td></tr>
<tr><td>27</td><td>DFCT</td><td>O</td><td>Defect detection signal output terminal.<br>VREF when a defect signal is detected: Normally HiZ. (Not used.)</td></tr>
<tr><td>28</td><td>TEL2</td><td rowspan="2">O</td><td rowspan="2">Tracking gain adjustment analog switch output terminal. VREF or HiZ.</td></tr>
<tr><td>29</td><td>TEL1</td></tr>
<tr><td>30</td><td>TGUL</td><td>O</td><td>Analog switch output terminal for switching the low range phase compensator of the tracking servo loop.<br>HiZ (gain up) when shock signal is detected; VREF when gain up.</td></tr>
<tr><td>31</td><td>TGUH2</td><td rowspan="2">O</td><td rowspan="2">Analog switch output terminal for switching the middle and high range phase compensator of the tracking servo loop. HiZ (gain up) when shock signal is detected; normally VREF. TGUH1 is used when playing back in normal mode; TGUH2 when playing back in high speed mode. (TGUH2 is not used.)</td></tr>
<tr><td>32</td><td>TGUH1</td></tr>
<tr><td>33</td><td>TKIC</td><td>O</td><td>Tracking actuator kick signal output terminal.<br>Kicked to an external cylinder when "H"; an internal cylinder when "L".</td></tr>
<tr><td>34</td><td>FMON</td><td rowspan="2">O</td><td rowspan="2">Feed servo ON/OFF analog switch output terminal. (Pin ㉟ is not used.)
<table>
<tr><th>Feed servo</th><th>FMON</th><th>$\overline{\mathrm{FMON}}$</th></tr>
<tr><td>ON</td><td>HiZ</td><td>VREF</td></tr>
<tr><td>OFF</td><td>VREF</td><td>HiZ</td></tr>
</table></td></tr>
<tr><td>35</td><td>$\overline{\mathrm{FMON}}$</td></tr>
</table>

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>36</td><td>FMFB</td><td>O</td><td>Feed motor FWD/BWD operation control signal output terminal.<br>Feeds to an external cylinder when "H"; feeds to an internal cylinder when "L".</td></tr>
<tr><td>37</td><td>$\overline{\mathrm{TEST}}$</td><td>I</td><td>Test terminal. Normally "H" or open. (Not used.)</td></tr>
<tr><td>38</td><td>DMON</td><td>O</td><td>Analog switch output terminal for switching the gain of the disk motor drive circuit.</td></tr>
<tr><td>39</td><td>DMFC</td><td>O</td><td>Disk motor CLV servo AFC signal output terminal.
<table>
<tr><th>Command</th><th>DMFC output</th><th>Operation</th></tr>
<tr><td>DMFK</td><td>H</td><td>Motor accelerated</td></tr>
<tr><td>DMSV</td><td>PWM</td><td>CLV servo ON</td></tr>
<tr><td>DMBK</td><td>L</td><td>Motor decelerated</td></tr>
<tr><td>DMOFF</td><td>VREF</td><td>CLV servo OFF</td></tr>
</table></td></tr>
<tr><td>40</td><td>DMPC</td><td>O</td><td>Disk motor CLV servo APC signal output terminal.</td></tr>
<tr><td>41</td><td>2VREF</td><td>I</td><td>Two times reference voltage input terminal. (VREF×2)</td></tr>
<tr><td>42</td><td>SEL</td><td>O</td><td>Servo mode indication signal output terminal.
<table>
<tr><th>SEL</th><th>LD ON/OFF</th><th>Focus servo</th><th>Operation mode</th></tr>
<tr><td>L</td><td>OFF</td><td>OFF</td><td>LD OFF</td></tr>
<tr><td>HiZ</td><td>ON</td><td>OFF</td><td>Focus search</td></tr>
<tr><td>H</td><td>ON</td><td>ON</td><td>Normal PLAY etc.,<br>(Focus servo ON: FOK)</td></tr>
</table></td></tr>
<tr><td>43</td><td>FCSI</td><td>O</td><td>Focus actuator drive signal output terminal in focus search mode.
<table>
<tr><th>Command</th><th>FKIC output</th><th>Operation</th></tr>
<tr><td>FGASR</td><td>H</td><td>Lens distant from disk</td></tr>
<tr><td>FGSS</td><td>L</td><td>Lens near disk</td></tr>
<tr><td>Others</td><td>HiZ</td><td>Other than focus search</td></tr>
</table></td></tr>
<tr><td>44</td><td>FKIC</td><td>O</td><td>Focus actuator drive signal output terminal in focus gain adjustment mode.
<table>
<tr><th>Command</th><th>FKIC output</th><th>Operation</th></tr>
<tr><td>FGASR</td><td>H</td><td>Lens distant from disk</td></tr>
<tr><td>FGSS</td><td>L</td><td>Lens near disk</td></tr>
<tr><td>Other</td><td>HiZ</td><td>Other than focus gain adjustment</td></tr>
</table></td></tr>
<tr><td>45</td><td>FEL2</td><td rowspan="2">O</td><td rowspan="2">Focus gain adjustment analog switch output terminal. (Not used.)</td></tr>
<tr><td>46</td><td>FEL1</td></tr>
<tr><td>47</td><td>FEI</td><td>I</td><td>Focus error signal input terminal.</td></tr>
<tr><td>48</td><td>TESH</td><td>I</td><td>Analog switch input terminal for sample-holding of the tracking error signal.</td></tr>
<tr><td>49</td><td>TEOF</td><td>O</td><td>Analog switch input terminal for tracking servo ON/OFF.<br>VREF when tracking servo is OFF.</td></tr>
<tr><td>50</td><td>SBAD</td><td>I</td><td>Sub-beam add signal input terminal.</td></tr>
<tr><td>51</td><td>RFRP</td><td>I</td><td>RF ripple signal input terminal.</td></tr>
<tr><td>52</td><td>VREF</td><td>I</td><td>Reference voltage input terminal. (+2.2V)</td></tr>
<tr><td>53</td><td>RFI</td><td>I</td><td>RF signal input terminal.</td></tr>
<tr><td>54</td><td>AGND</td><td>—</td><td>Analog GND terminal.</td></tr>
<tr><td>55</td><td>DTSC2</td><td>O</td><td>EFM signal negative-phase output terminal for data slice control.</td></tr>
<tr><td>56</td><td>EFMO</td><td>O</td><td>EFM signal monitor output terminal. (Not used.)</td></tr>
<tr><td>57</td><td>DTSC1</td><td>O</td><td>EFM signal positive-phase output terminal for data slice control.</td></tr>
<tr><td>58</td><td>AVCC</td><td>—</td><td>Analog power voltage terminal. (+5V)</td></tr>
<tr><td>59</td><td>PDCNT</td><td>I</td><td>PDO output control terminal. PDO output is involuntarily set to HiZ when "L".</td></tr>
<tr><td>60</td><td>PDO</td><td>O</td><td>Output terminal for phase difference signal between EFM and PLCK signals.</td></tr>
</table>

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>61</td><td>TMAX</td><td>O</td><td>TMAX signal output terminal. HiZ in system lock.
<table>
<tr><th>TMAX cycle</th><th>TMAX output</th></tr>
<tr><td>Longer than specified cycle</td><td>L</td></tr>
<tr><td>Shorter than specified cycle</td><td>H(2VREF)</td></tr>
<tr><td>Specified cycle</td><td>HiZ</td></tr>
</table></td></tr>
<tr><td>62</td><td>LPFN</td><td>I</td><td>LPF amplifier negative-phase input terminal for PLL.</td></tr>
<tr><td>63</td><td>LPFO</td><td>O</td><td>LPF amplifier output terminal for PLL.</td></tr>
<tr><td>64</td><td>VCOF</td><td>I</td><td>VCO filter terminal.</td></tr>
<tr><td>65</td><td>VCOX</td><td>I</td><td>External VCO clock input terminal. (GND)</td></tr>
<tr><td>66</td><td>PLCK</td><td>O</td><td>Playback data read clock output terminal. (Not used.)</td></tr>
<tr><td>67</td><td>MOD0</td><td rowspan="3">I</td><td rowspan="3">Internal operation mode setting input terminal. (GND)</td></tr>
<tr><td>68</td><td>MOD1</td></tr>
<tr><td>69</td><td>MOD2</td></tr>
<tr><td>70</td><td>WDCK</td><td>O</td><td>Word clock output terminal. Normally 88.2kHz. (Not used.)</td></tr>
<tr><td>71</td><td>CHCK</td><td>O</td><td>Channel clock output terminal. Normally 44.1kHz.</td></tr>
<tr><td>72</td><td>BCK</td><td>O</td><td>Bit clock output terminal. Normally 1.4112MHz.</td></tr>
<tr><td>73</td><td>AOUT</td><td>O</td><td>Audio data output terminal.</td></tr>
<tr><td>74</td><td>CKSE</td><td>I</td><td>Internal clock selection terminal. (+5V)</td></tr>
<tr><td>75</td><td>DOUT</td><td>O</td><td>Digital OUT output terminal. (Not used.)</td></tr>
<tr><td>76</td><td>$\overline{\text{TEST2}}$</td><td>I</td><td>Test terminal. Normally "H" or open. (Not used.)</td></tr>
<tr><td>77</td><td>$\overline{\text{HS}}$</td><td>O</td><td>High-speed monitor output terminal. High-speed mode when "L". (Not used.)</td></tr>
<tr><td>78</td><td>EMPH</td><td>O</td><td>Emphasis ON/OFF indication signal output terminal. Emphasis ON when "H".</td></tr>
<tr><td>79</td><td>$\overline{\text{TEST3}}$</td><td>I</td><td>Test terminal. Normally "H" or open. (Not used.)</td></tr>
<tr><td>80</td><td>MCK</td><td>O</td><td>Master clock output terminal. (Not used.)</td></tr>
</table>

## IC,TA8191F

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | TPO | O | Sub-beam I-V amplifier (TP AMP) output terminal. |
| 2 | TPI | I | Sub-beam I-V amplifier (TP AMP) input terminal. |
| 3 | TNI | I | Sub-beam I-V amplifier (TP AMP) input terminal. |
| 4 | FNI | I | Main-beam I-V amplifier (FN AMP) input terminal. |
| 5 | FPI | I | Main-beam I-V amplifier (FP AMP) input terminal. |
| 6 | LDO | O | Laser diode amplifier (LD AMP) output terminal. |
| 7 | MDI | I | Monitor photo diode amplifier (MD AMP) input terminal. |
| 8 | RFN | I | RF amplifier (RF AMP) negative-phase input terminal. |
| 9 | RFO | O | RF amplifier (RF AMP) output terminal. |
| 10 | RFI | I | RF ripple signal forming circuit input terminal. |
| 11 | VREF | O | Reference voltage output terminal. (+2.1V) |
| 12 | RFRP | O | RF ripple signal output terminal. |
| 13 | SBAD | O | Scratch detection signal output terminal. |
| 14 | FEB | I | Focus error balance adjustment input terminal. |
| 15 | FEO | O | Focus error amplifier (FE AMP) output terminal. |
| 16 | SEL | I | Analog switch control signal input terminal. |
| 17 | VEE | — | Power terminal. (GND) |
| 18 | FSN | I | Focus output amplifier (FS AMP) negative-phase input terminal. |
| 19 | FSO | O | Focus output amplifier (FS AMP) output terminal. |
| 20 | COSC | O | Capacitor connection terminal for focus search signal generation. |
| 21 | OSCI | I | Built-in power supply control input terminal for focus search signal generation. |
| 22 | GND | — | GND |
| 23 | VCC | I | Power supply terminal. (+5V) |
| 24 | DMEP | I | Disk motor amplifier (DM AMP) positive-phase input terminal. |
| 25 | DMEN | I | Disk motor amplifier (DM AMP) negative-phase input terminal. |
| 26 | DMEO | O | Disk motor amplifier (DM AMP) output terminal. |
| 27 | DMPO | O | Disk motor drive amplifier (DMP AMP) output terminal. (Not used.) |
| 28 | PVR | I | Drive amplifier reference voltage input terminal. |
| 29 | FMPO | O | Feed motor drive amplifier (FMP AMP) output terminal. (Not used.) |
| 30 | FMEO | O | Feed motor drive amplifier (FM AMP) output terminal. |
| 31 | FMEN | I | Feed motor amplifier (FM AMP) negative-phase input terminal. |
| 32 | FMEP | I | Feed motor amplifier (FM AMP) positive-phase input terminal. |
| 33 | FAPO | O | Focus actuator drive amplifier (FAP AMP) output terminal. (Not used.) |
| 34 | 2VRO | O | 2VREF amplifier (2VREF AMP) output terminal. |
| 35 | 2VRP | I | 2VREF amplifier (2VREF AMP) positive-phase input terminal. |
| 36 | 2VRN | I | 2VREF amplifier (2VREF AMP) negative-phase input terminal. |
| 37 | TS2O | O | Tracking servo amplifier 2 (TS2 AMP) output terminal. |
| 38 | TS2N | I | Tracking servo amplifier 2 (TS2 AMP) negative-phase input terminal. |
| 39 | TS2P | I | Tracking servo amplifier 2 (TS2 AMP) positive-phase input terminal. |
| 40 | TS1O | O | Tracking servo amplifier 1 (TS1 AMP) output terminal. |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 41 | TS1N | I | Tracking servo amplifier 1 (TS1 AMP) negative-phase input terminal. |
| 42 | TS1P | I | Tracking servo amplifier 1 (TS1 AMP) positive-phase input terminal. |
| 43 | TSO | O | Tracking output amplifier (TS AMP) output terminal. |
| 44 | TSN | I | Tracking output amplifier (TS AMP) negative-phase input terminal. |

## IC,LC7218M

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | X IN | I | Connected to the crystal clock oscillator. |
| 2 | CE | I | Input terminal of control data from microcomputer TMP47C820F-N837. |
| 3 | DI | I | |
| 4 | CL | I | |
| 5 | DO | I | |
| 6 | SYN | — | Not used. |
| 7 | AS IN0 | I | "L" when tuning. "H" in cases other than tuning. |
| 8 | LED IN1 | I | "L" when stereo broadcasting. "H" in other case than stereo broadcasting. |
| 9 | $\overline{\text{OUT0}}$ | O | Not used. |
| 10 | MODE1 $\overline{\text{OUT1}}$ | O | Tuner sound mode selection output. AUTO \| MONO<br>H \| L |
| 11 | MODE2 $\overline{\text{OUT2}}$ | — | Not used. |
| 12 | FM $\overline{\text{OUT3}}$ | — | Not used. |
| 13 | SW (MW) $\overline{\text{OUT4}}$ | O | Tuner band selection output. |
| 14 | MW (LW) $\overline{\text{OUT5}}$ | O | Tuner band selection output. |
| 15 | LCTR | I | IF COUNT for AUTO STOP. AM 450kHz input terminal. |
| 16 | HCTR | I | IF COUNT for AUTO STOP. FM 10.7MHz input terminal. |
| 17 | FM $\overline{\text{OUT6}}$ | O | Tuner band selection output. FM/$\overline{\text{AM}}$ |
| 18 | AM IN | I | AM oscillation frequency input. |
| 19 | FM IN | I | FM oscillation frequency input. |
| 20 | VCC | — | +5V power supply terminal. |
| 21 | PD1 | O | Tuning voltage control output. |
| 22 | PD2 | — | Not used. |
| 23 | GND | — | GND |
| 24 | XOUT | O | Connected to crystal oscillator. |

## IC, BU3559CS

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | MUTE | O | MUTE output terminal. |
| 2 | $\overline{\text{CD}}$ | O | "L" output when CD. |
| 3 | $\overline{\text{TU}}$ | O | "L" output when TU. |
| 4 | $\overline{\text{AUX}}$ | O | "L" output when AUX. |
| 5 | $\overline{\text{TAPE}}$ | O | "L" output when TAPE. |
| 6 | LEDS4 | – | Not used. |
| 7 | NIGHT | O | Trigger pulse output terminal. |
| 8 | LEDS6 | – | Not used. |
| 9 | TRY STOP | O | CD operation stop output terminal. |
| 10 | LEDC0 | – | Not used. |
| 11 | LEDC1 | – | Not used. |
| 12 | LEDC2 | – | Not used. |
| 13 | $\overline{\text{HALT}}$ | I | Hold input terminal (ACTIVE Low). |
| 14 | OSC2 | O | 4MHz clock output. |
| 15 | OSC1 | I | 4MHz clock input. |
| 16 | GND | – | GND. |
| 17 | A・GND | – | Ground for analog circuit. |
| 18 | F・KEY | I | Input key matrix terminal. |
| 19 | CMPO | – | Not used. |
| 20 | CMPI | – | Not used. |
| 21 | TRAY KEY | I | CD tray OPEN/CLOSE key input. |
| 22 | A VDD | – | Power supply for analog circuit. |
| 23 | $\overline{\text{INIT}}$ | I | Reset input terminal (ACTIVE Low). |
| 24 | A | O | Function control output terminal. |
| 25 | B | O | Function control output terminal. |
| 26 | OPEN | O | Loading mechanism control output terminal. |
| 27 | CLOSE | | |
| 28 | IN SW | I | CD tray IN SW input terminal ("L" or "H"). |
| 29 | OUT SW | I | CD tray OUT SW input terminal ("L" or "H"). |
| 30 | I-REC | I | Connect to ground. |
| 31 | REMOTE | I | Remote control signal input terminal. |
| 32 | VDD | – | Power supply. |

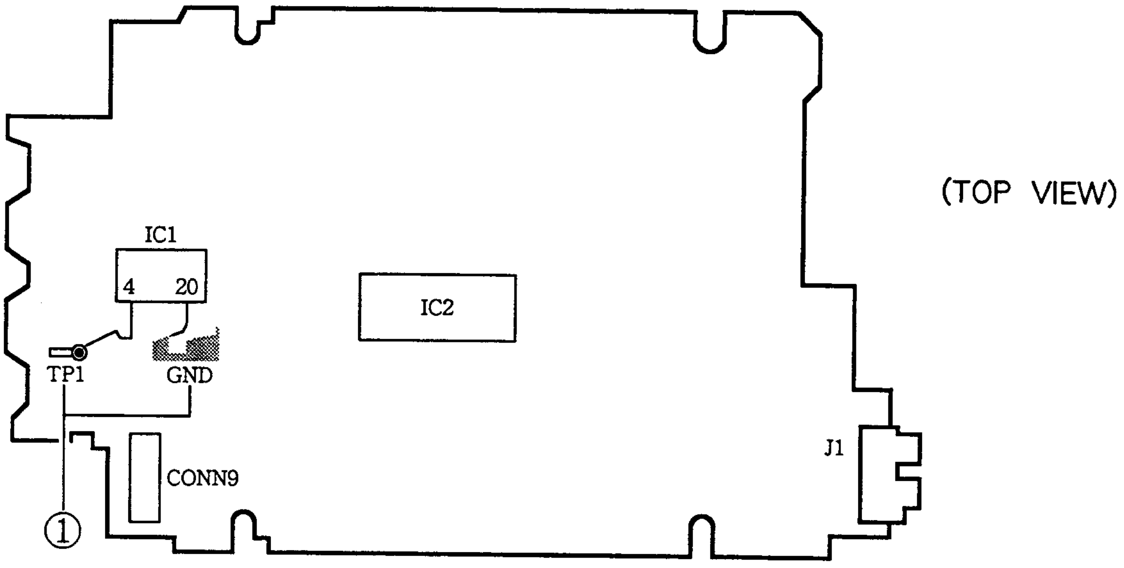
## IC,TMP47C820F – N837

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1～4 | SEG28～SEG31 | O | Segment output terminal for LCD display. |
| 5～7 | COM1～COM3 | O | Common output terminal for LCD display. |
| 8 | COM4 | — | Not used. |
| 9 | N. C | — | Not used. |
| 10 | VLC | — | LCD drive voltage setting. Normal: VSS level (GND) |
| 11 | P10 | O | Power switch (ON = "H"). |
| 12～14 | P11～P13 | O | Key matrix output port. |
| 15 | VSS | — | GND |
| 16～19 | P20～P23 | O | Key matrix output port. |
| 20 | TEST | — | GND |
| 21 | X IN | I | 4.19MHz clock oscillation input. |
| 22 | X OUT | O | 4.19MHz clock oscillation output. |
| 23 | $\overline{\text{RESET}}$ | I | Reset signal input. ("L" when reset.) |
| 24 | $\overline{\text{HOLD}}$ | I | Hold signal input. ("L" when hold.) |
| 25～28 | K00～K03 | I | Key matrix input port. |
| 29 | REMO | I | Wireless remote control input. |
| 30 | DWN | O | Power VOL DOWN. |
| 31 | UP | O | Power VOL UP. |
| 32 | MUTE | O | Muting output. |
| 33 | VDD | — | +5V power supply. |
| 34 | D0 | O | Tuner data output. |
| 35 | DI | I | Tuner data input. |
| 36 | CL | O | Tuner data clock. |
| 37～40 | BUS0～BUS3 | I/O | Send/receive bus line to/from CD processor. |
| 41 | DA/CO | I/O | Command and data processing control I/O. |
| 42 | BUCK | O | Command and data send/receive clock output. |
| 43 | $\overline{\text{PU IN}}$ | I | Detects that the pickup is positioned at the most internal cylinder. |
| 44 | $\overline{\text{DOOR}}$ | I | CD door CLOSE detection. CLOSE when 0V. |
| 45 | $\overline{\text{CD}}$ | I | Function CD. CD when "L". |
| 46 | $\overline{\text{TU}}$ | I | Function TUNER. TUNER when "L". |
| 47 | $\overline{\text{CD RESET}}$ | I | CD circuit initialize signal input. (Reset when "L".) |
| 48 | I-REC | I | Tape recorder REC operation detection signal. |
| 49 | SYNC | O | Tape recorder synchronization stop output. Stop when "L". Turn when "H". |
| 50 | TUCE | O | Tuner CE. Controls the tuner PLL IC. |
| 51 | $\overline{\text{STEREO}}$ | I | Indicate "STEREO" when input "L". |
| 52 | ———— | — | NC. |
| 53～61 | SEG0～SEG8 | O | Not used. |
| 62～80 | SEG9～SEG27 | O | Segment output terminal for LCD display. |

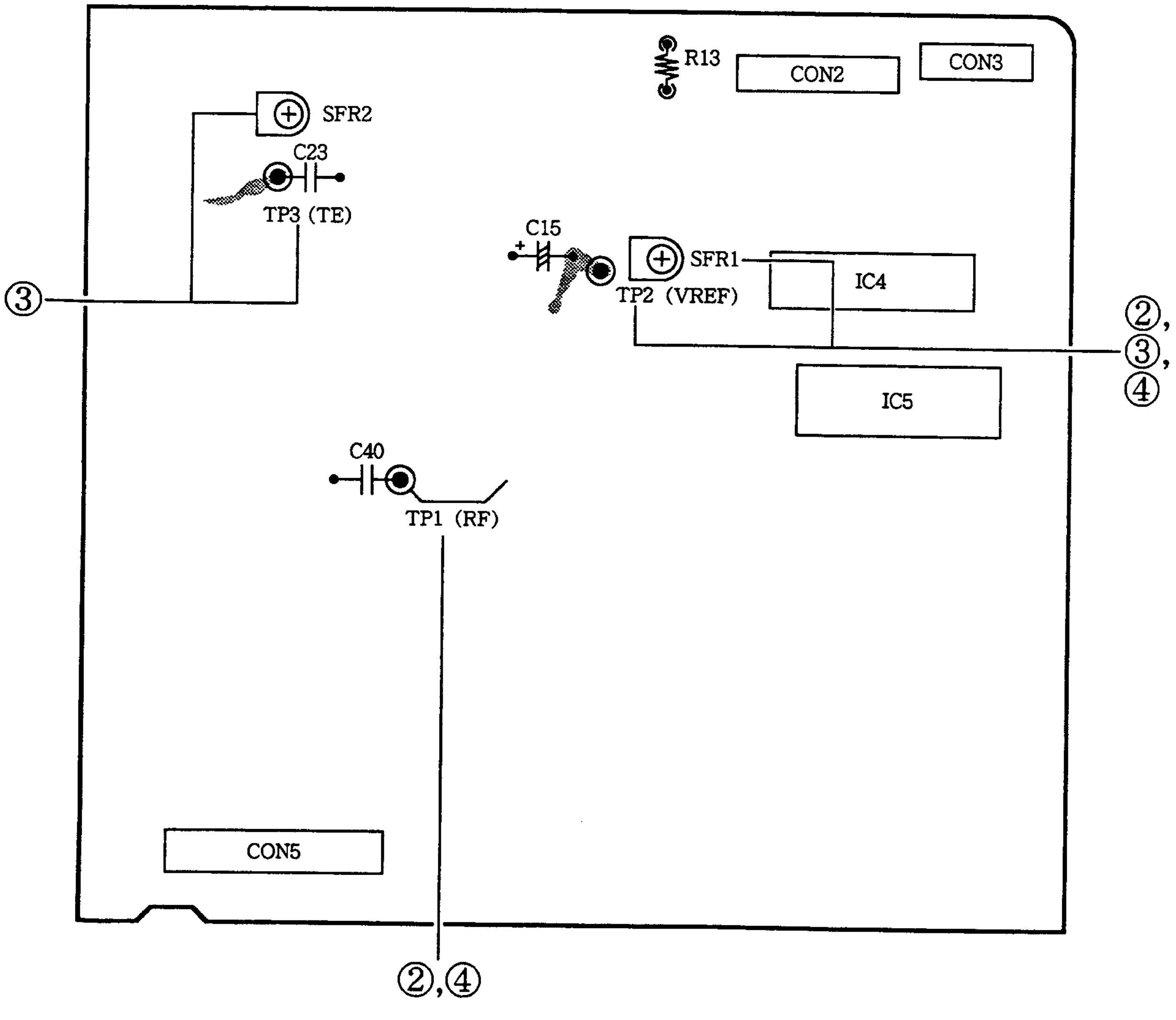
ADJUSTMENT (RDX – 01)

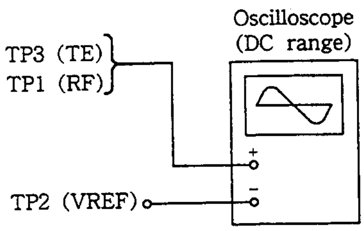
(CD/MAIN SECTION)

B MAIN C. B (Pattern side)


(TOP VIEW)
IC1
4
20
IC2
TP1
GND
CONN9
J1
①

C CD MAIN C. B (TOP VIEW)


R13
CON2
CON3
SFR2
C23
TP3 (TE)
C15
SFR1
IC4
TP2 (VREF)
③
②,
③,
④
IC5
C40
TP1 (RF)
CON5
②,④



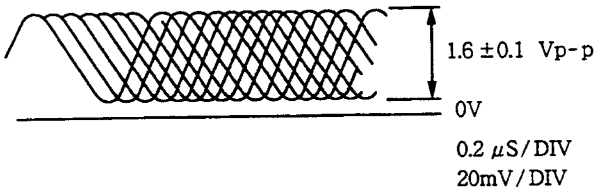
Note : • Connect the minus side of the oscilloscope to a test point TP2 (VREF) when performing the step 2~4 adjustment.

• Connect a probe (10:1) of the frequency counter or the oscilloscope to a test point and adjust as follows.

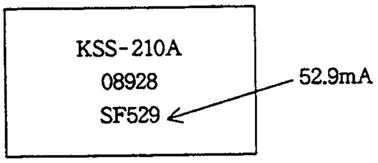
1. Clock Frequency check (clock, B MAIN C.B.)
   Settings : • Test point : TP1
   • Set the function to CD mode.
   Method : 1) Connect the frequency counter to test points TP1 and GND.
   2) Check the frequency counter shows 42.666~42.667Hz.

2. RF Wave Form Check
   This check should be performed whenever the optical system block is replaced in repair.
   1) Connect an oscilloscope to test points TP1 (RF) and TP2 (VREF).
   2) Turn the power switch on.
   3) Insert the test disc TCD-782 (YEDS-18) and play back the second composition.
   4) Check that the wave form appears as shown in the figure below.

RF signal wave form

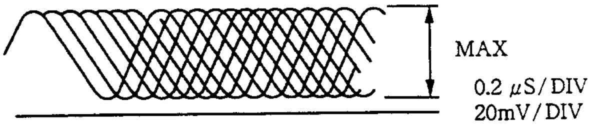


Note : The current of the laser signal can be checked with voltages on both sides of R13 (10 Ω).
The difference for specified value shown on label must be within ± 6.0mA.

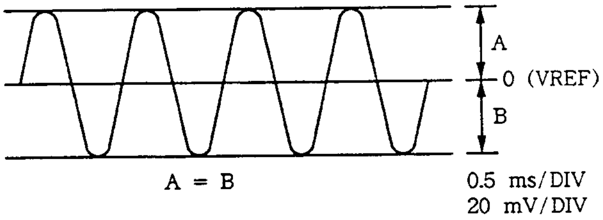


$$\text{Laser current Iop} = \frac{\text{Voltage across R13}}{10\ \Omega}$$

3. Focus Balance Adjustment
   1) Connect an oscilloscope to test points TP1 (RF) and TP2 (VREF).
   2) Turn the power switch on.
   3) Insert the test disc TCD-782 (YEDS-18) and push the PLAY button.
   4) Adjust SFR1 so that wave form of the oscilloscope is the maximum.



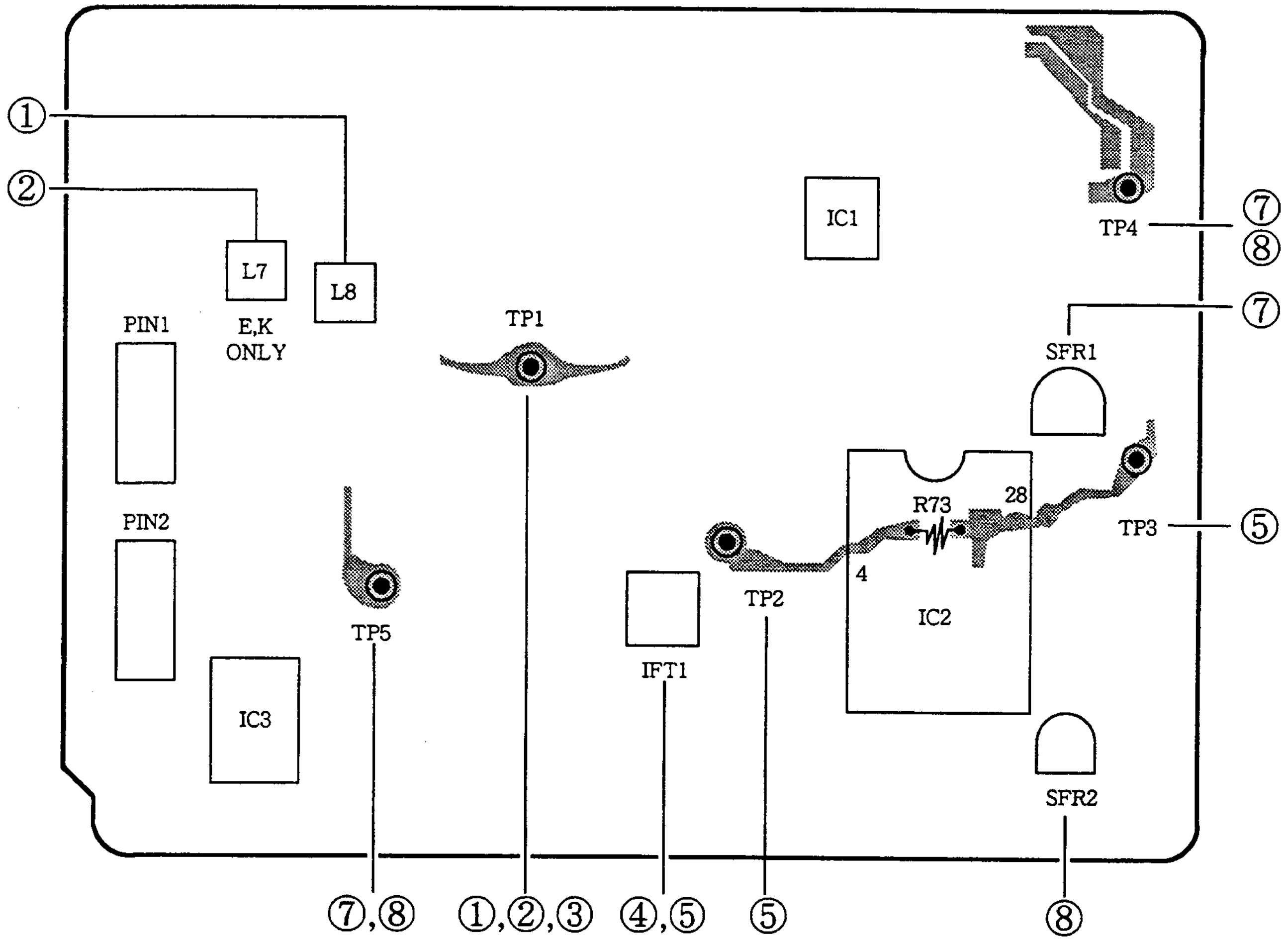
4. Tracking Balance Adjustment
   1) Connect an oscilloscope to test points TP3 (TE) and TP2 (VREF).
   2) Turn the power switch on.
   3) Insert the test disc TCD-782 (YEDS-18) and push the MEMORY/SET button.
   4) Memory the second composition of the test disc and push the REPEAT button first, and then PLAY button.
   5) Change the mode from "MS" to "SEARCH" and keep the FF button pushing.
   6) Adjust SFR2 so that wave form on the oscilloscope is vertically symmetrical as shown in the figure below.



(TUNER SECTION)

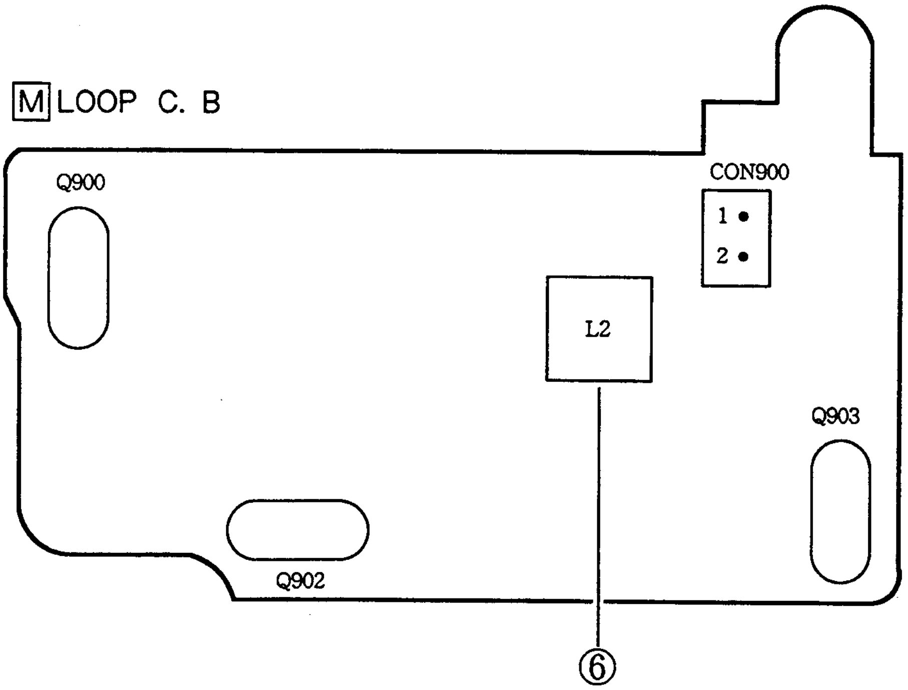
H, LH, U, E, K :

A TUNER C. B


①
②
L7
L8
E,K ONLY
PIN1
PIN2
IC3
TP1
TP5
IFT1
TP2
IC1
TP4
⑦
⑧
SFR1
⑦
R73
28
4
IC2
TP3
⑤
SFR2
⑦,⑧
①,②,③
④,⑤
⑤
⑧

(TOP VIEW)

M LOOP C. B


Q900
CON900
1
2
L2
Q903
Q902
⑥

1. AM (MW) VT Adjustment

Settings :
- Test point : TP1
- Adjustment location : L8
- Set the function to AM (MW) mode.

Method :
1) Set to AM (MW) as table-1 frequencies and adjust so that the test point becomes as table-1 shown voltage.
2) Set to AM (MW) as table-2 shown frequencies and check VT voltages at the test point are within as table-2 shown.

Table-1

| | AM (MW) FREQUENCY | VOLTAGE |
|---|---|---|
| H | 531kHz | 1.4 ± 0.05V |
| E, K | 522kHz | |
| U, LH | 530kHz | |

Table-2

| | AM (MW) FREQUENCY | VOLTAGE |
|---|---|---|
| H | 1602kHz | 7.8 ± 0.5V |
| E, K | 1611kHz | 8.1 ± 0.5V |
| U, LH | 1710kHz | 8.8 ± 0.5V |

2. LW VT Adjustment (E, K only)

Settings :
- Test point : TP1
- Adjustment location : L7
- Set the function to LW mode.

Method :
1) Set to LW 153kHz and adjust so that the test point becomes 1.9 ± 0.05V.
2) Set to LW 288kHz and check the VT voltage at the test point is 5.9 ± 0.5V.

3. FM VT Check

Settings :
- Test point : TP1
- Set the function to FM mode.

Method : Set to FM frequencies and check VT voltages at the test point are within as table-3 shown.

Table-3

| FM FREQUENCY | VOLTAGE |
|---|---|
| 87.5MHz | 3.5 ± 0.3V |
| 108MHz | 7.1 ± 0.5V |

4. FM IF Adjustment

IFT1 ........................................ 10.7MHz

5. DC Balance Adjustment

Settings :
- Test point :
  TP2 (Minus terminal side of R73)
  TP3 (Plus terminal side of R73)
- SSG : 98MHz, 54dB
- Adjustment location : IFT1

Method : Set to FM 98MHz and adjust IFT1 so that TP2 and TP3 output becomes 0 ± 10mV.

6. AM (MW) Tracking Adjustment

L2 ........................ U, LH : 600kHz
Except U, LH : 603kHz

7. FM Auto Stop Adjustment

Settings :
- Test point : TP4 (GND), TP5
- Adjustment location : SFR1
- Input level : 30dB

Method :
1) Set to FM 98.0MHz and adjust "TUNED" LED to light on by SFR1.
2) "TUNED" LED goes out by 1dB down.

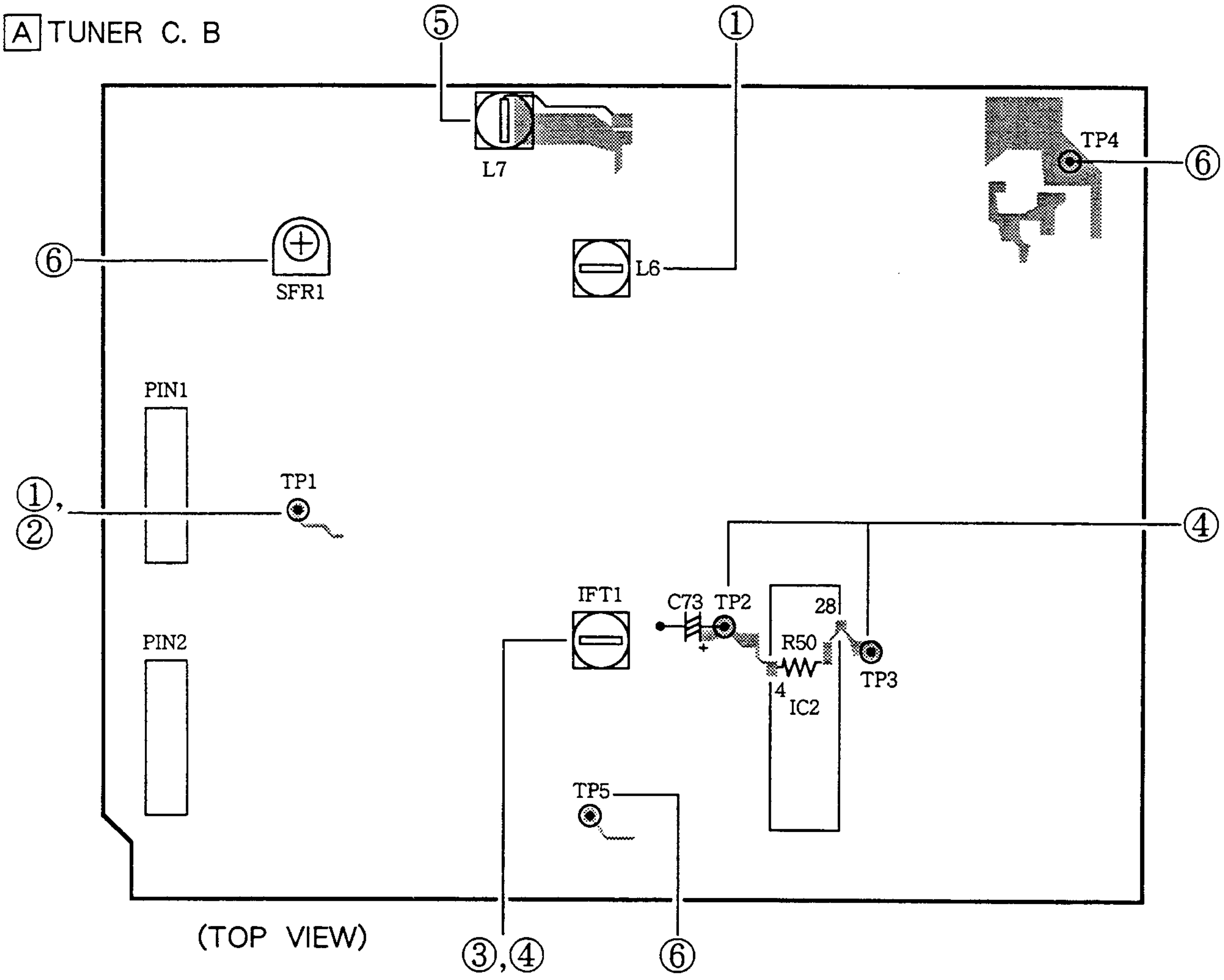
8. AM (MW) Auto Stop Adjustment

Settings :
- Test point : TP4 (GND), TP5
- Adjustment location : SFR2
- Input level : 60dB

Method :
1) Set to AM (MW) 1000kHz (U, LH), 1404kHz (except U, LH) and adjust "TUNED" of LCD display to light on by SFR2.
2) "TUNED" of LCD display goes out by 2dB down.

HD :

## A TUNER C. B



1. AM VT Adjustment
   Settings : • Test point : TP1
   • Adjustment location : L6
   • Set the function to AM mode.
   Method : 1) Set to AM 522kHz and adjust so that the test point becomes 1.6 ± 0.05V.
   2) Set to AM 1629kHz and check the VT voltage at the test point is within 7.8 ± 0.5V.

2. FM VT Check
   Settings : • Test point : TP1
   • Set the function to FM mode.
   Method : Set FM as table-4 frequencies and check VT voltages at the test point are within as table-4 shown.

Table-4

| FM FREQUENCY | VOLTAGE |
|---|---|
| 76MHz | 1.3 ± 0.3V |
| 108MHz | 8.0 ± 0.5V |

3. FM IF Adjustment
   IFT1 ········································ 10.7MHz

4. DC Balance Adjustment
   Settings : • Test point :
   TP2 (Minus terminal side of R50)
   TP3 (Plus terminal side of R50)
   • SSG : 76MHz, 54dB
   • Adjustment location : IFT1
   Method : Set to FM 76.0MHz and adjust IFT1 so that TP2 and TP3 output becomes 0 ± 20mV.

5. AM Tracking Adjustment
   L7 ························· 603kHz

6. FM Auto Stop Adjustment
   Settings : • Test point : TP4 (GND), TP5
   • Adjustment location : SFR1
   • Input level : 30dB
   Method : 1) Set to FM 76.0MHz and adjust "TUNED" of LCD display to light on by SFR1.
   2) "TUNED" of LCD display goes out by 1dB down.

# PRACTICAL SERVICE FIGURE

## < FM SECTION >

| | |
|---|---|
| IHF Sensitivity :<br>(THD 3%) | H, LH, U, E, K<br>(87.5~108MHz) :<br>19 ± 5dB (at 87.7, 108MHz)<br>17 ± 5dB (at 98MHz)<br><br>HD (76.0~108MHz) :<br>16 ± 6dB (at 76MHz)<br>13 ± 6dB (at 90,108MHz) |
| S/N ratio : | H, LH, U, E, K :<br>65 ± 5dB (at 98MHz)<br>HD :<br>62 ± 5dB (at 90MHz) |
| Distortion :<br>(Input 54dB) | Less than 2.0% |
| Stereo separation : | H, LH, U, HD :<br>31 ± 7dB (at 1kHz)<br>E, K :<br>32 ± 7dB (at 1kHz) |
| Intermediate frequency : | 10.7MHz |
| Auto stop level : | H, LH, U, E, K :<br>30 ± 5dB (at 98MHz)<br>HD :<br>30 ± 4dB (at 76MHz) |

## < AM (MW) SECTION >

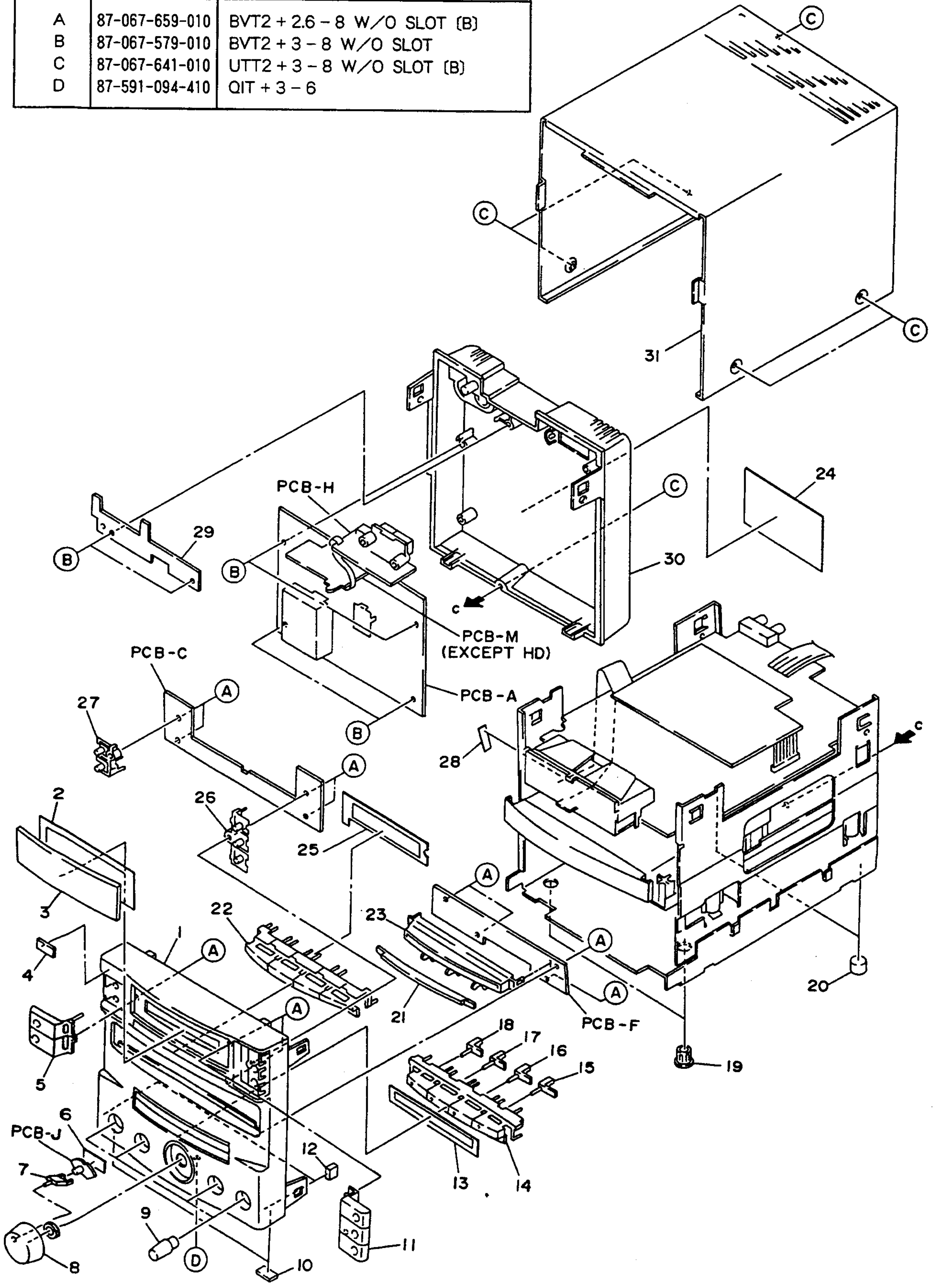
| | |
|---|---|
| Sensitivity :<br>(S/N 10dB) | H (531~1602kHz) :<br>47 ± 5dB (at 603kHz)<br>45 ± 5dB (at 999, 1404kHz)<br><br>U, LH (530~1710kHz) :<br>47 ± 5dB (at 600kHz)<br>45 ± 5dB (at 1000, 1400kHz)<br><br>E, K (522~1611kHz) :<br>49 ± 5dB (at 603kHz)<br>46 ± 5dB (at 999kHz)<br>45 ± 5dB (at 1404kHz)<br><br>HD (522~1629kHz) :<br>41 ± 5dB (at 603, 999kHz)<br>43 ± 5dB (at 1404kHz) |
| S/N ratio : | More than 35dB<br>[at 999kHz (H, E, K)]<br>[at 1000kHz (LH, U)]<br>More than 37dB<br>[at 999kHz (HD)] |
| Intermediate frequency : | 450kHz |
| Auto stop level : | H, E, K :<br>57 ± 5dB (at 1404kHz)<br>U, LH :<br>57 ± 5dB (at 1000kHz)<br>HD :<br>$53 \pm^{10}_{13}$ dB (at 603kHz) |

## < LW SECTION > (E, K ONLY)

| | |
|---|---|
| Sensitivity :<br>(S/N 10dB) | E, K (153~288kHz)<br>60 ± 5dB (at 153kHz)<br>57 ± 5dB (at 198,288kHz) |
| S/N ratio : | More than 25dB<br>(at 198kHz) |

# EXPLODED VIEW – 1 (RDX – 01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 87-067-659-010 | BVT2 + 2.6 – 8 W/O SLOT (B) |
| B | 87-067-579-010 | BVT2 + 3 – 8 W/O SLOT |
| C | 87-067-641-010 | UTT2 + 3 – 8 W/O SLOT (B) |
| D | 87-591-094-410 | QIT + 3 – 6 |

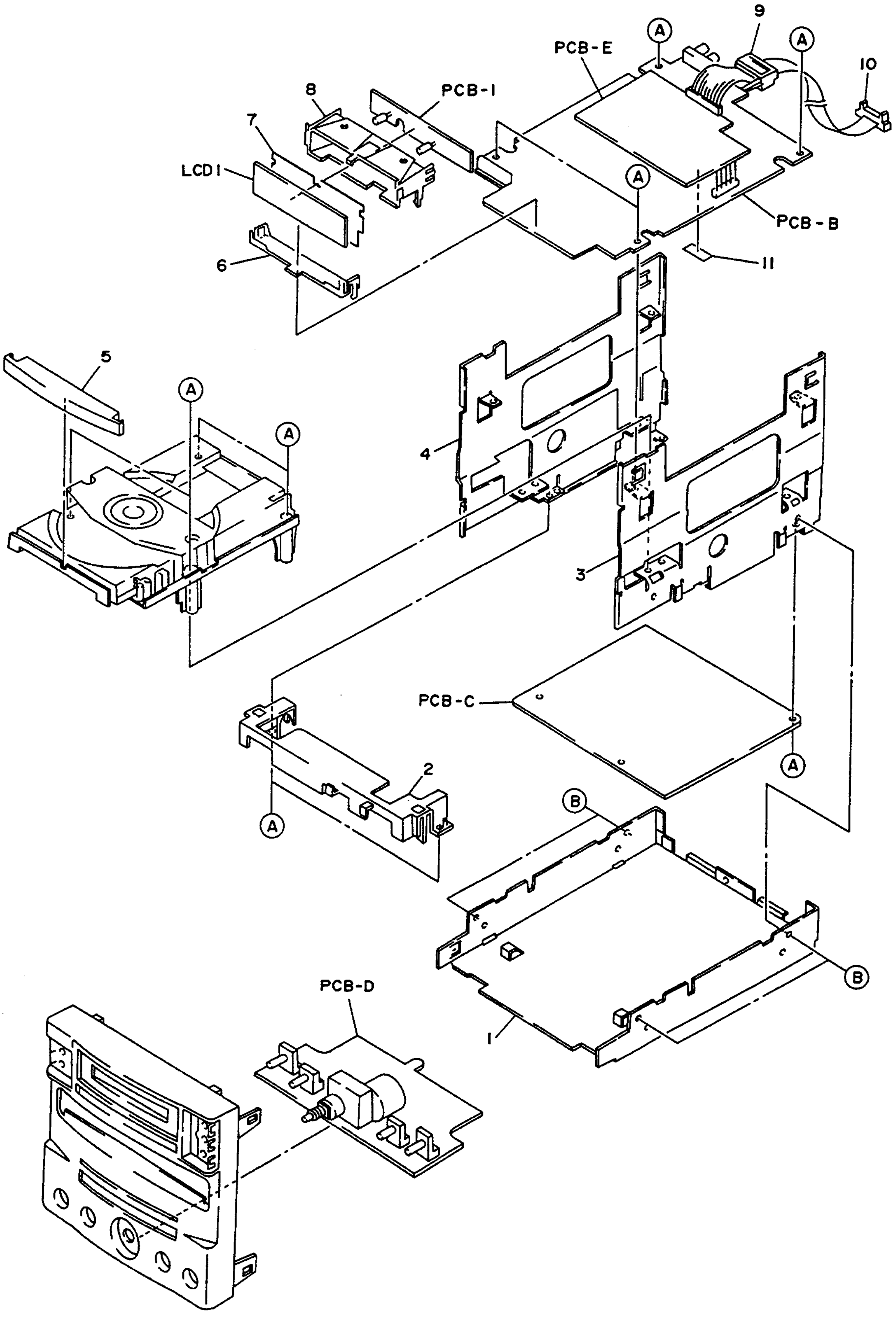

C
C
C
31
C
24
30
PCB-H
29
B
B
c
PCB-M
(EXCEPT HD)
PCB-C
A
27
PCB-A
B
A
28
c
2
26
25
3
A
22
23
A
4
1
A
21
PCB-F
A
20
A
5
18
17
16
15
19
6
PCB-J
12
7
13
14
9
8
D
10
11

# MECHANICAL PARTS LIST (RDX – 01)

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 1-1 | ★81-NKB-001-019 | CABINET, FRONT (EXCEPT YU) | ※ | 1 |
| | 1-1 | ★81-NKB-025-019 | CABINET, FRONT (YU) | ※ | 1 |
| | 1-2 | ★81-NKB-213-019 | ADHESHIVE SHEET, WINDOW | ※ | 1 |
| | 1-3 | ★81-NKB-009-019 | WINDOW, LCD | ※ | 1 |
| | 1-4 | ★81-MX4-032-019 | BADGE, AIWA | | 1 |
| | 1-5 | ★81-NKB-006-019 | KEY, POWER | ※ | 1 |
| | 1-6 | ★81-NKB-599-019 | CLOTH, 6 – 10 | ※ | 1 |
| | 1-7 | ★81-NKB-013-019 | LENS, VOLUME | ※ | 1 |
| | 1-8 | ★81-NKB-010-019 | KNOB, VOLUME | ※ | 1 |
| | 1-9 | ★81-NKB-011-019 | KNOB, TONE | ※ | 4 |
| | 1-10 | ★81-NWB-027-019 | FOOT, FRONT | | 2 |
| | 1-11 | ★81-NKB-007-019 | KEY, BAND | ※ | 1 |
| | 1-12 | --- | CUSHION, G 3 – 5 – 5 | | 2 |
| | 1-13 | ★81-NKB-216-019 | SHEET, FUNCTION (EXCEPT YU) | ※ | 1 |
| | 1-13 | ★81-NKB-223-019 | SHEET, FUNCTION (YU) | ※ | 1 |
| | 1-14 | ★81-NKB-004-019 | BUTTON, FUNCTION | ※ | 1 |
| | 1-15 | ★81-NKB-014-019 | LENS, CD | ※ | 1 |
| | 1-16 | ★81-NKB-017-019 | LENS, LINE IN | ※ | 1 |
| | 1-17 | ★81-NKB-015-019 | LENS, TUNER | ※ | 1 |
| | 1-18 | ★81-NKB-016-019 | LENS, TAPE | ※ | 1 |
| | 1-19 | ★81-NKB-019-019 | BUSHING, STAND | ※ | 2 |
| | 1-20 | ★81-NKB-018-019 | FOOT | ※ | 2 |
| | 1-21 | ★81-NKB-012-019 | LENS, ILL | ※ | 1 |
| | 1-22 | ★81-NKB-005-019 | BUTTON, CD | ※ | 1 |
| | 1-23 | ★81-NKB-209-019 | HOLDER, ILL | ※ | 1 |
| | 1-24 | ★81-NKB-022-019 | PLATE, SPEC (YHJ) | ※ | 1 |
| | 1-24 | ★81-NKB-027-019 | PLATE, SPEC (YLH) | ※ | 1 |
| | 1-24 | ★81-NKB-028-019 | PLATE, SPEC (YHD) | ※ | 1 |
| | 1-24 | ★81-NKB-021-119 | PLATE, SPEC (YU) | ※ | 1 |
| | 1-24 | ★81-NKB-023-019 | PLATE, SPEC (YE) | ※ | 1 |
| | 1-25 | ★81-NKB-221-019 | SHEET, LCD FRONT (EXCEPT YU) | ※ | 1 |
| | 1-25 | ★81-NKB-224-019 | SHEET, LCD FRONT (YU) | ※ | 1 |
| | 1-26 | ★81-NKB-205-019 | HINGE, BAND | ※ | 1 |
| | 1-27 | ★81-NKB-204-019 | HINGE, POWER | ※ | 1 |
| | 1-28 | ★81-NKB-214-019 | HIMERON, 6 – 40 (EXCEPT YU) | ※ | 1 |
| | 1-28 | ★81-NKB-222-019 | HIMERON, 6 – 40 (YU) | ※ | 1 |
| | 1-29 | ★81-NKB-210-019 | HOLDER, BUSHING | ※ | 1 |
| | 1-30 | ★81-NKB-002-019 | CABINET, REAR (EXCEPT YU) | ※ | 1 |
| | 1-30 | ★81-NKB-026-019 | CABINET, REAR (YU) | ※ | 1 |
| | 1-31 | ★81-NKB-003-019 | CABINET, STEEL | ※ | 1 |

# EXPLODED VIEW – 2 (RDX – 01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 87-067-579-010 | BVT2 + 3 – 8 W/O SLOT |
| B | 87-067-641-010 | UTT2 + 3 – 8 W/O SLOT (B) |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PCB-E
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PCB-D
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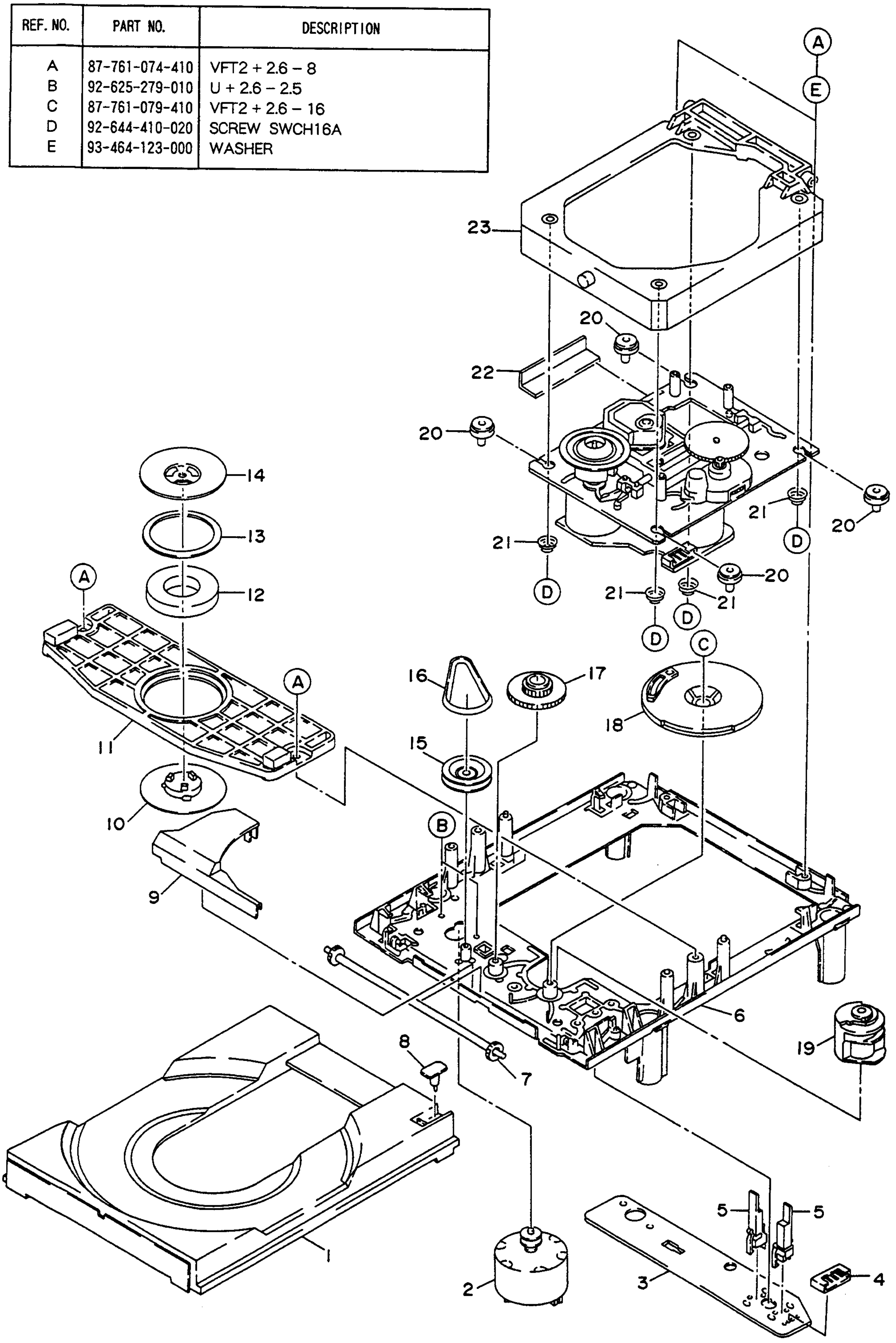
| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 2-1 | ★81-NKB-201-019 | CHASSIS, MAIN CD | ※ | 1 |
| | 2-2 | ★81-NKB-206-019 | HOLDER, CD P.C.B | ※ | 1 |
| | 2-3 | ★81-NKB-203-119 | CHASSIS, SIDE R | ※ | 1 |
| | 2-4 | ★81-NKB-202-119 | CHASSIS, SIDE L | ※ | 1 |
| | 2-5 | ★81-NKB-008-019 | PANEL, CD | ※ | 1 |
| | 2-6 | --- | HOLDER, LCD | | 1 |
| | 2-7 | ★81-NKB-211-119 | SHEET, LCD | ※ | 1 |
| | 2-8 | --- | HOLDER, LAMP LCD | | 1 |
| | 2-9 | ★89-VT5-202-010 | BUSHING, CORD | | 1 |
| | 2-10 | --- | 17P CONNECTOR ASSY | | 1 |
| | 2-11 | ★81-NKB-215-019 | CLOTH, 6 – 20 | ※ | 1 |

# EXPLODED VIEW – 3 (RDX – 01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 87-761-074-410 | VFT2 + 2.6 – 8 |
| B | 92-625-279-010 | U + 2.6 – 2.5 |
| C | 87-761-079-410 | VFT2 + 2.6 – 16 |
| D | 92-644-410-020 | SCREW SWCH16A |
| E | 93-464-123-000 | WASHER |



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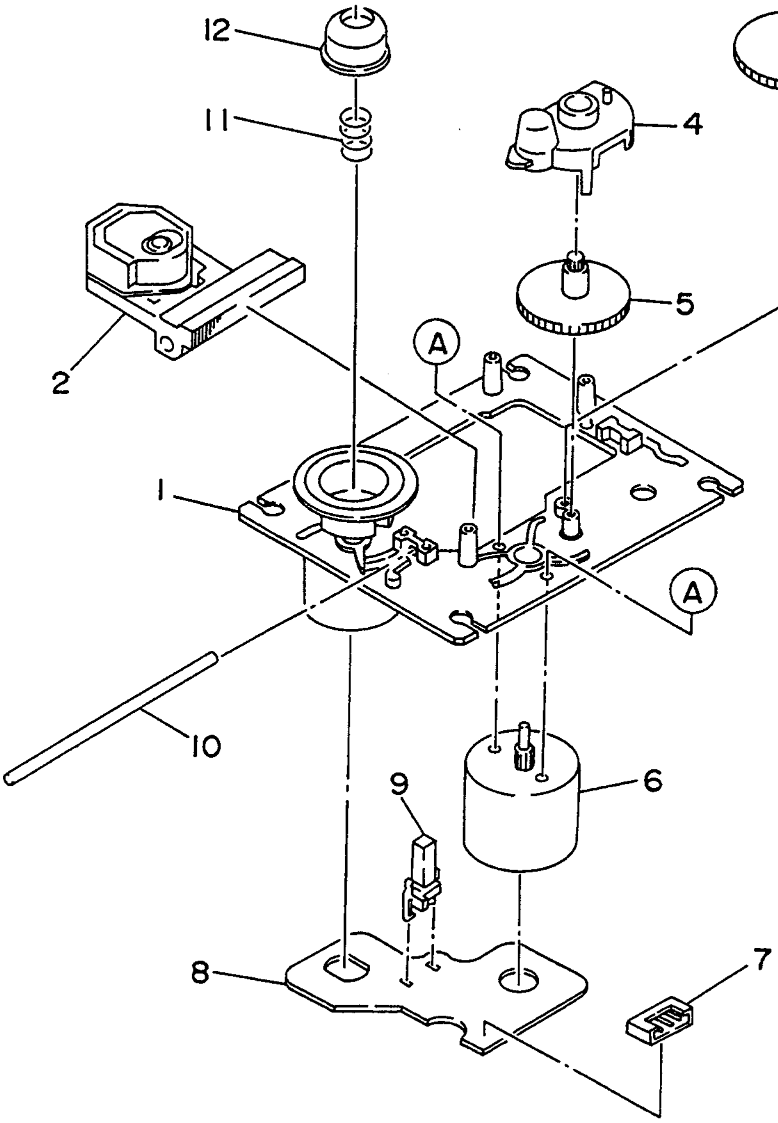
| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 3-1 | ★92-625-288-040 | TRAY | | 1 |
| | 3-2 | ★9X-262-511-710 | LOADING MOTOR ASSY | | 1 |
| | 3-3 | --- | PWB, LOADING | | 1 |
| | 3-4 | ★91-564-721-110 | CONNECTOR 5P | | 1 |
| | 3-5 | 91-572-086-110 | SWITCH, LEAF | | 2 |
| | 3-6 | --- | CHASSIS, MAIN | | 1 |
| | 3-7 | ★92-625-275-030 | GEAR, TRAY | | 1 |
| | 3-8 | --- | SW PIN | | 1 |
| | 3-9 | ★92-625-282-020 | COVER, GEAR | | 1 |
| | 3-10 | ★92-625-286-030 | PULLEY, CHUCKING | | 1 |
| | 3-11 | ★92-625-284-040 | PLATE, CHUCKING | | 1 |
| | 3-12 | ★91-452-493-210 | MAGNET | | 1 |
| | 3-13 | ★92-625-541-010 | DAMPER | | 1 |
| | 3-14 | ★92-625-277-010 | YOKE, CHUCK | | 1 |
| | 3-15 | ★92-625-276-010 | PULLEY, LOADING | | 1 |
| | 3-16 | ★93-653-387-000 | BELT, LM | | 1 |
| | 3-17 | ★92-625-274-020 | GEAR, MEDDLE | | 1 |
| | 3-18 | ★92-625-285-030 | GEAR, DRIVE | | 1 |
| | 3-19 | ★92-625-283-020 | CAM, CONTROL | | 1 |
| | 3-20 | ★92-625-278-010 | INSULATOR | | 4 |
| | 3-21 | ★92-625-280-010 | SPRING | | 4 |
| | 3-22 | --- | PLATE, PUSH | | 1 |
| | 3-23 | --- | SUB CHASSIS ASSY W/INSU SHAFT | | 1 |

# EXPLODED VIEW – 4 (RDX – 01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| A | 87-261-032-210 | V + 2 – 3 |



| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 4-1 | ★9X-262-513-310 | T.T CHASSIS ASSY W/MOTOR | | 1 |
| | 4-2 | 98-848-127-11Z | PICK UP KSS – 210A | | 1 |
| | 4-3 | ★92-625-188-020 | GEAR, A | | 1 |
| | 4-4 | ★92-625-544-010 | COVER | | 1 |
| | 4-5 | --- | GEAR, B | | 1 |
| | 4-6 | ★9X-262-513-210 | SLED MOTOR ASSY | | 1 |
| | 4-7 | ★91-564-722-110 | CONNECTOR 6P | | 1 |
| | 4-8 | --- | PWB, MOTOR | | 1 |
| | 4-9 | 91-572-085-110 | SWITCH, LEAF LIMIT | | 1 |
| | 4-10 | ★94-917-565-010 | SHAFT, SLED | | 1 |
| | 4-11 | ★92-625-191-010 | SPRING, COMPRESSION | | 1 |
| | 4-12 | ★92-625-187-010 | RING, CENTER | | 1 |

## ■ SPEAKER LIST (SX－01)

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q,TY |
|---|---|---|---|---|---|
| | 1 | ★81-NSB-101-019 | SPEAKER ASSY | ※ | 2 |
| | 2 | ★81-NSB-601-019 | SPEAKER WOOFER | ※ | 2 |
| | 3 | ★81-MS3-603-019 | SPEAKER TWEETER | | 2 |

## ■ ACCESSORIES／PACKAGE LIST

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q,TY |
|---|---|---|---|---|---|
| | 1 | ★82-CT1-907-110 | INSTRUCTION BOOKLET, EX | ※ | 1 |
| | 2 | ★82-CT1-912-010 | SHEET, INSTRUCTION BOOKLET HD | ※ | 1 |
| | 3 | ★81-748-632-010 | FEEDER ANTENNA FMN | | 1 |
| | 4 | ★82-CT1-901-010 | LOOP ANTENNA 3P | ※ | 1 |
| | 5 | ★82-CT1-903-010 | REMOTE CONTROLLER, RC－L01 EX | ※ | 1 |
| | 6 | ★87-032-845-010 | PLUG, CONVERSION (H, LH, HD) | | 1 |

| サービス技術ニュース | |
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**アイワ株式会社**
**AIWA CO.,LTD.**

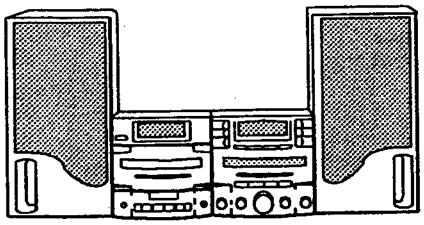
912204, 861377

Tokyo Japan

〒110 東京都台東区池之端1－2－11　☎03（3827）3111　（代表）　Printed in Japan

# LCX-01

# SERVICE MANUAL



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : α - 14MK II
- BASIC CD MECHANISM : KSL - 2101ABM
- TYPE. HR. Z

## [SUPPLEMENT]

| SYSTEM | CD PLAYER/ TUNER | CASSETTE DECK/ AMPLIFIER | SPEAKERS | REMOTE CONTROLLER |
|---|---|---|---|---|
| LCX - 01 | RDX - 01 | FX - 01 | SX - 01 | RC - 01 |

■Only the modifications are stated in this manual.
Use this manual with LCX - 01 service manual (S/M Code No. 0182, for H, LH, U, E, K, HD types).

■For HR type, refer to destinations E (except parts of the PT and AC circuit board section) and H (only for parts of the PT and AC circuit board section) in the LCX - 01 service manual (S/M Code No. 0182) if requiring the other service informations.

■For Z type, refer to destination E in the LCX - 01 service manual (S/M Code No. 0182) if requiring the other service informations.

S/M Code No. 0283 DATE OF ISSUE 6/1993 - T

# SPECIFICATIONS

## Tuner section

| | |
|---|---|
| **Frequency ranges** | LCX-01 HR:<br>FM: 87.5-108.0 MHz<br>AM: 531/530-1602/1600 kHz (9/10 kHz step)<br>LCX-01 Z:<br>FM: 87.5-108.0 MHz<br>MW: 522/530-1611/1600 kHz (9/10 kHz step)<br>LW: 153-288 kHz |
| **Antennas** | LCX-01 HR:<br>Feeder antenna for FM<br>Loop antenna for AM<br>LCX-01 Z:<br>Unipolar antenna for FM<br>Loop antenna for MW and LW |

## Amplifier section

| | |
|---|---|
| **Power output** | LCX-01 HR:<br>15 W+15 W (5 ohms, T. H. D. 10 % 1 kHz)<br>LCX-01 Z:<br>12 W+12 W (5 ohms, T. H. D. 1 % 1 kHz) |
| **Input sensitivity (load impedance)** | AUX/DAT/MD/DCC 775 mV (47 k ohms) |

## Cassette deck section

| | |
|---|---|
| **Track format** | 4 tracks/2 channels |
| **Recording system** | AC bias |
| **Erase system** | AC erase |
| **Tape speed** | 4.8 cm/sec. (1 7/8 ips) |
| **Motor** | DC servomotor (1) |
| **Heads** | Recording/Playback/Erasure head (1) |
| **Frequency response** | Normal tape (Recording/Playback):<br>40-15,000 Hz<br>$CrO_2$ tape (Recording/Playback): 40-16,000 Hz<br>Metal tape (Playback only): 40-16,000 Hz |

## CD player section

| | |
|---|---|
| **Disc** | Compact disc |
| **Scanning method** | Non contact optical scanner (semiconductor laser application) |
| **Laser** | Semiconductor laser $\lambda$ =780 nm |
| **Rotation speed** | Approx. 500-200 rpm/CLV |
| **Error correction** | Cross Interleave, Reed Solomon Code |
| **No. of channels** | 2 channels |
| **D.A. conversion** | 16 bit linear |
| **Frequency response** | 20 Hz-20,000 Hz $^{+3}_{-4}$ dB |

## Speaker

| | |
|---|---|
| **Cabinet type** | Bass reflex |
| **Speaker** | 130 mm (5 1/8 in.) cone type woofer<br>50 mm (2 in.) cone type tweeter |
| **Impedance** | 5 ohms |
| **Music power** | 25 W |
| **Output sound pressure level** | 88 dB/W/m |

## General

| | |
|---|---|
| **Power source** | LCX-01 HR:<br>AC 110-120 V/220-240 V (switchable),<br>50/60 Hz<br>LCX-01 Z: AC 230 V, 50 Hz |
| **Power consumption** | LCX-01 HR, Z: 115 W |
| **Dimensions (WxHxD)** | FX-01 (Cassette deck/Amplifier unit):<br>148 x 146 x 260 mm (5 7/8 x 5 6/8 x 10 1/4 in.)<br>RDX-01 (CD player/Tuner unit):<br>148 x 146 x 220 mm (5 7/8 x 5 6/8 x 8 5/8 in.)<br>SX-01 (Speaker):<br>146 x 292 x 200 mm (5 6/8 x 11 4/8 x 7 7/8 in.) |
| **Weight** | FX-01: 3.5 kg (7.7 lbs.)<br>RDX-01: 2.0 kg (4.4 lbs.)<br>SX-01: 2.5 kg (5.5 lbs.) |

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound, Inc.

## ■ ACCESSORIES／PACKAGE LIST

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q.TY |
|---|---|---|---|---|---|
| | 1 | 82-CT1-907-319 | INSTRUCTION BOOKLET, EX | ※ | 1 |
| | 2 | 81-748-632-019 | FEEDER ANTENNA FMN (HR) | | 1 |
| | 3 | 82-CT1-901-010 | LOOP ANTENNA 3P | ※ | 1 |
| | 4 | 82-CT1-903-019 | REMOTE CONTROLLER, RC－L01, EXZ) | ※ | 1 |
| | 5 | 82-032-845-019 | CONVERSION PLUG (HR) | | 1 |
| | 6 | 87-043-106-010 | WIRE ANTENNA FM (Z) | | 1 |

# ALTERNATION PARTS LIST

## ELECTRICAL MAIN PARTS LIST (FX－01)

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| ===MAIN CIRCUIT BOARD SECTION=== | | |
| C252 | 87-018-119-089 | CAP, CERA-SOL SS 100P-50 B(Z) |
| C253 | 87-018-127-089 | CAP, CERA-SOL SS 470P(Z) |
| L202 | 87-008-372-089 | FILTER EMI BL 01RNI(Z, HR) |
| L204 | 81-NKB-655-019 | COIL, 10UH TROIDAL(Z) |
| L205 | 81-NKB-655-019 | COIL, 10UH TROIDAL(Z) |
| L206 | 81-NKB-655-019 | COIL, 10UH TROIDAL(Z) |
| L207 | 81-NKB-655-019 | COIL, 10UH TROIDAL(Z) |
| ===DECK CIRCUIT BOARD SECTION=== | | |
| C470 | 87-018-123-089 | CAP, CERA-SOL SS 220P-50 B(Z) |
| C471 | 87-018-123-089 | CAP, CERA-SOL SS 220P-50 B(Z) |
| ===POWER CIRCUIT BOARD SECTION=== | | |
| C140 | 87-018-209-089 | CAP, CERA-SOL SS 0.1-50 F(Z) |
| C141 | 87-018-209-089 | CAP, CERA-SOL SS 0.1-50 F(Z) |
| C146 | 87-018-119-089 | CAP, CERA-SOL SS 100P-50 B(Z) |
| C147 | 87-018-119-089 | CAP, CERA-SOL SS 100P-50 B(Z) |
| L101 | 87-008-372-089 | FILTER EMI BL 01RNI(Z) |
| ⚠R123 | 87-029-361-099 | FUSE, RES 3.3-1/2W FM(Z, HR) |
| ⚠R124 | 87-029-361-099 | FUSE, RES 3.3-1/2W FM(Z, HR) |
| ⚠R125 | 87-029-361-099 | FUSE, RES 3.3-1/2W FM(Z, HR) |
| ⚠R126 | 87-029-361-099 | FUSE, RES 3.3-1/2W FM(Z, HR) |
| ⚠R127 | 87-029-361-099 | FUSE, RES 3.3-1/2W FM(Z, HR) |
| ⚠R128 | 87-029-361-099 | FUSE, RES 3.3-1/2W FM(Z, HR) |
| ===PT CIRCUIT BOARD SECTION=== | | |
| C142 | 87-018-203-089 | CAP, CERA-SOL SS 8200P-16 Y(Z) |
| C143 | 87-018-203-089 | CAP, CERA-SOL SS 8200P-16 Y(Z) |
| C144 | 87-018-203-089 | CAP, CERA-SOL SS 8200P-16 Y(Z) |
| C145 | 87-018-203-089 | CAP, CERA-SOL SS 8200P-16 Y(Z) |
| ⚠PT101 | 81-NWB-634-019 | POWER TARNSFORMER Z(Z) |
| ⚠PT101 | 81-NWB-633-019 | POWER TARNSFORMER HR(HR) |

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| ===DISPLAY CIRCIUT BOARD SECTION=== | | |
| C603 | 87-018-134-089 | CAP, CERA-SOL SS 0.01-16 Y(Z) |
| C604 | 87-018-134-089 | CAP, CERA-SOL SS 0.01-16 Y(Z) |
| C605 | 87-018-134-089 | CAP, CERA-SOL SS 0.01-16 Y(Z) |
| C606 | 87-018-134-089 | CAP, CERA-SOL SS 0.01-16 Y(Z) |
| ===HP CIRCUIT BOARD SECTION=== | | |
| C149 | 87-018-132-089 | CAP, CERA-SOL SS 2200P-16 X(Z) |

## MECHANICAL PARTS LIST (FX－01)

### EXPLODED VIEW－1

| PART NO. CHANGED | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 1-23 | 81-NWB-045-019 | LABEL, SPEC (Z) | ※ | 1 |
| | 1-23 | 81-NWB-047-019 | LABEL, SPEC (HR) | ※ | 1 |
| | 1-29 | 81-NWB-040-019 | LABEL, AC SWITCH (H, LH, HR) | ※ | 1 |

### EXPLODED VIEW－2

| PART NO. CHANGED | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 2-6 | 81-NWB-637-019 | SHEET, PT 76－43 (E, K, Z, HR) | ※ | 1 |
| | 2-12 | 82-187-797-019 | CORD, AC (E, K, Z, HR) | | 1 |
| | 2-13 | 87-085-185-010 | BUSHING, AC CORD (E, K, Z, HR) | | 1 |
| | 2-17 | 81-NWB-640-019 | SHEET, FIBER 35－43 (E, K, Z, HR) | ※ | 1 |

## ELECTRICAL MAIN PARTS LIST (RDX－01)

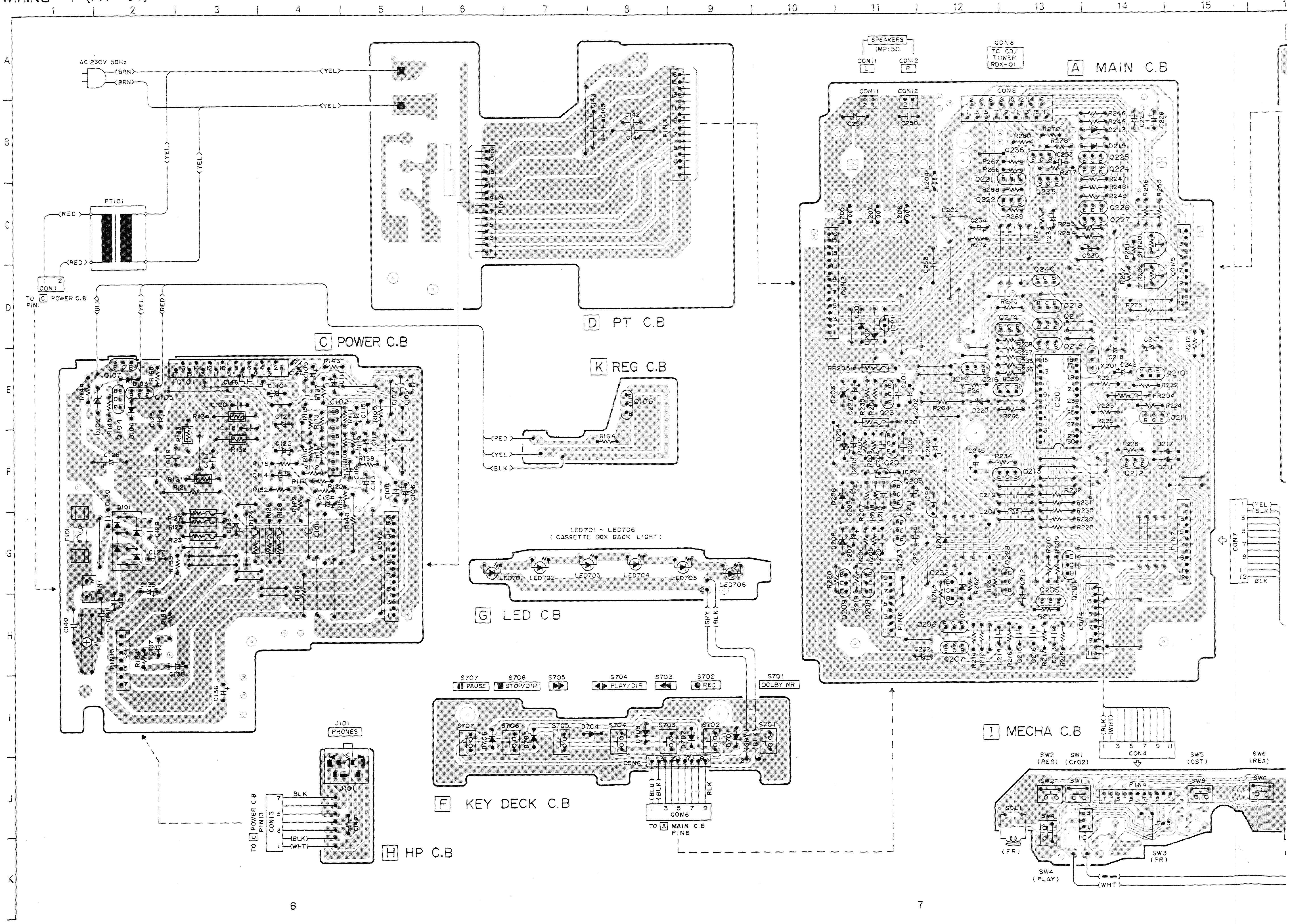
| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| ===TUNER CIRCUIT BOARD SECTION(Z ONLY)=== | | |
| C1 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C2 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C3 | 87-010-311-089 | CAP, CHIP S 12P-50 CH |
| C4 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C5 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C6 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C7 | 87-010-312-089 | CAP, CHIP S 15P-50 CH |
| C8 | 87-010-311-089 | CAP, CHIP S 12P-50 CH |
| C9 | 87-010-148-089 | CAP, CHIP S 4P-50 CH |
| C10 | 87-010-145-089 | CAP, CHIP S 1P-50 CH |
| C11 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C12 | 87-010-170-089 | CAP, CHIP S 220P-50 CH |
| C13 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C14 | 87-010-145-089 | CAP, CHIP S 1P-50 CH |
| C15 | 87-010-149-089 | CAP, CHIP S 5P-50 CH |
| C16 | 87-010-158-089 | CAP, CHIP S 22P-50 SL |
| C17 | 87-010-154-089 | CAP, CHIP S 10P-50 CH |
| C18 | 87-010-312-089 | CAP, CHIP S 15P-50 CH |
| C19 | 87-010-312-089 | CAP, CHIP S 15P-50 CH |
| C20 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C21 | 87-010-146-089 | CAP, CHIP S 2P-50 CH |
| C22 | 87-010-148-089 | CAP, CHIP S 4P-50 CH |
| C23 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C24 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C25 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C26 | 87-010-311-089 | CAP, CHIP S 12P-50 CH |
| C27 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C28 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C29 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C30 | 87-010-196-089 | CAP, CHIP S 0.1-25 F |
| C31 | 87-010-158-089 | CAP, CHIP S 22P-50 SL |
| C32 | 87-014-049-089 | CAP, PP 470P-100 J |
| C33 | 87-014-050-089 | CAP, PP 510P-100 J |
| C34 | 87-010-168-089 | CAP, CHIP S 150P-50 S |
| C35 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C36 | 87-010-186-089 | CAP, CHIP S 4700P-50 B |
| C37 | 87-010-402-089 | CAP, ELECT 2.2-50 SME |
| C38 | 87-010-384-089 | CAP, ELECT 100-25 SME |
| C39 | 87-010-400-089 | CAP, ELECT 0.47-50 SME |
| C40 | 87-010-405-089 | CAP, ELECT 10-50 SME |
| C41 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C42 | 87-010-404-089 | CAP, ELECT 4.7-50 SME |
| C44 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C45 | 87-010-401-089 | CAP, ELECT 1-50 SME |
| C46 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C47 | 87-010-196-089 | CAP, CHIP S 0.1-25 F |
| C48 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C49 | 87-010-198-089 | CAP, CHIP S 0.022-25 B |
| C50 | 87-010-248-089 | CAP, ELECT 220-10 SME |
| C51 | 87-010-402-089 | CAP, ELECT 2.2-50 SME |
| C52 | 87-010-183-089 | CAP, CHIP S 2700P-50 B |
| C53 | 87-010-189-089 | CAP, CHIP S 8200P-50 B |
| C54 | 87-010-404-089 | CAP, ELECT 4.7-50 SME |
| C55 | 87-012-156-089 | CAP, CHIP S 220P CH |
| C56 | 87-010-404-089 | CAP, ELECT 4.7-50 SME |
| C57 | 87-010-404-089 | CAP, ELECT 4.7-50 SME |
| C58 | 87-010-401-089 | CAP, ELECT 1-50 SME |
| C59 | 87-010-546-089 | CAP, ELECT 0.33-50 SME |
| C60 | 87-010-401-089 | CAP, ELECT 1-50 SME |
| C61 | 87-012-149-089 | CAP, CHIP S 30P-50 CH |
| C62 | 87-010-315-089 | CAP, CHIP S 27P-50 CH |
| C63 | 87-010-263-089 | CAP, ELECT 100-10 |
| C64 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C65 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C66 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C67 | 87-010-322-089 | CAP, CHIP S 100P-50 CH |
| C68 | 87-010-322-089 | CAP, CHIP S 100P-50 CH |

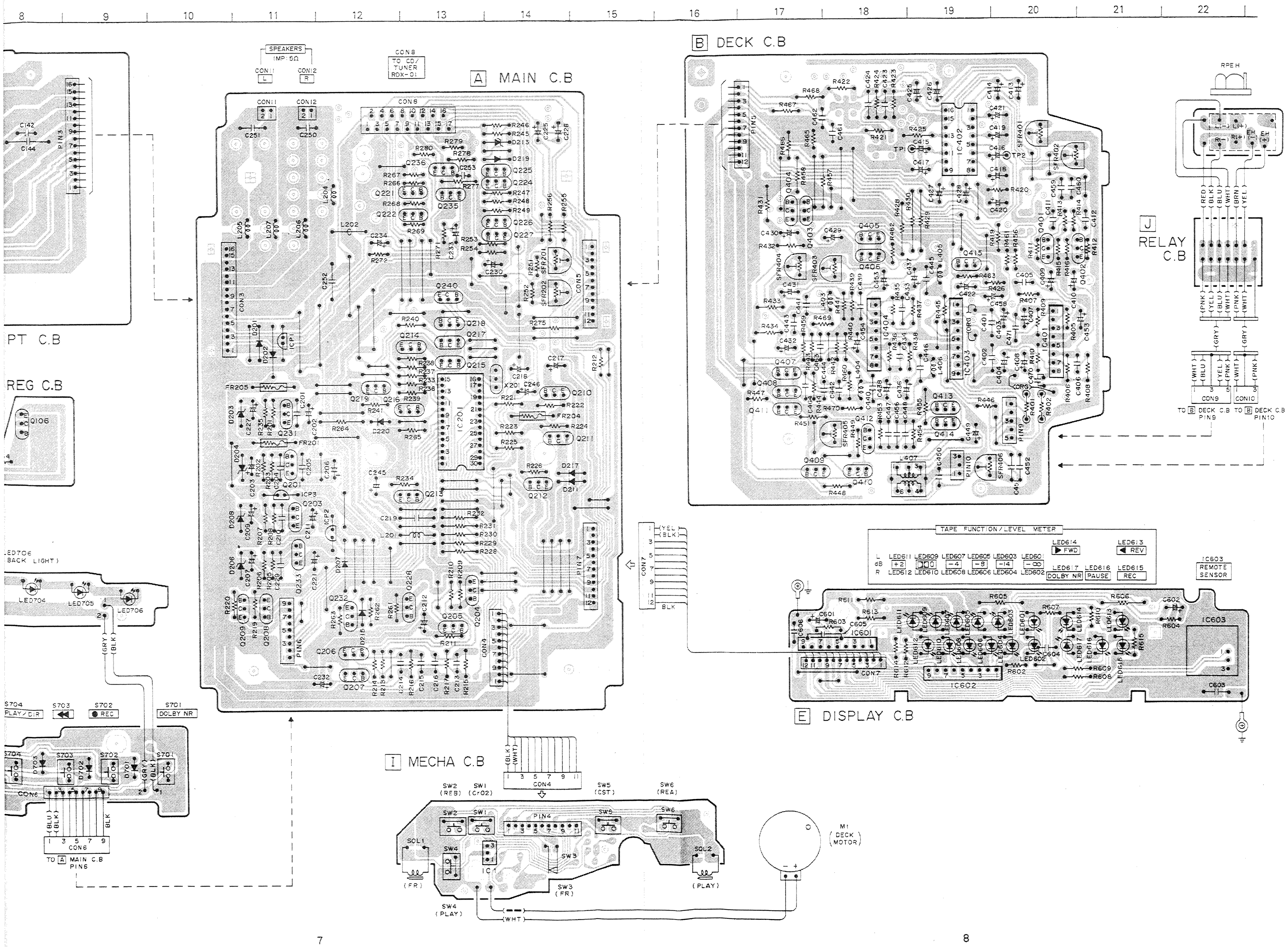
| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| C69 | 87-010-314-089 | CAP, CHIP S 22P-50 CH |
| C70 | 87-010-314-089 | CAP, CHIP S 22P-50 CH |
| C71 | 87-010-314-089 | CAP, CHIP S 22P-50 CH |
| C72 | 87-010-178-089 | CAP, CHIP S 1000P-50 B |
| C73 | 87-010-318-089 | CAP, CHIP S 47P-50 CH |
| C74 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C75 | 87-010-221-089 | CAP, ELECT 470-10 |
| C76 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C77 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C78 | 87-010-260-089 | CAP, ELECT 47-25 SME |
| C79 | 87-010-544-089 | CAP, ELECT 0.1-50 |
| C80 | 87-010-544-089 | CAP, ELECT 0.1-50 |
| C81 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C82 | 87-010-197-089 | CAP, CHIP S 0.01-25 B |
| C100 | 87-010-177-089 | CAP, CHIP S 820P-50 SL |
| CF1 | 87-030-105-019 | FILTER, BPMB6A |
| CF2 | 82-799-621-019 | CF MS2-A |
| CF3 | 87-008-261-019 | FILTER, SFE10.7MA5-A |
| CF4 | 87-008-261-019 | FILTER, SFE10.7MA5-A |
| IFT1 | 87-008-458-019 | IFT, FM(QUAD)PS |
| J2 | 87-099-315-019 | TERMINAL, ANT FM |
| L1 | 87-006-209-019 | COIL, ANT FM 3/4 T |
| L2 | 87-006-210-019 | COIL, ANT FM 2 3/4 T |
| L3 | 87-006-200-019 | COIL, RF FM 3-1/2T, L5 |
| L4 | 87-006-201-019 | COIL, RF FM3-1/2TS, L5 |
| L5 | 87-006-201-019 | COIL, RF FM3-1/2TS, L5 |
| L6 | 87-006-205-019 | COIL, OSC FM(7K) |
| L7 | 87-003-231-089 | COIL, CHIP S S1UH |
| L8 | 87-008-427-019 | COIL FMIFT(4T) |
| L9 | 87-006-207-019 | COIL, ANT MW(3B) |
| L10 | 87-006-208-019 | COIL, ANT LW |
| L11 | 82-794-687-019 | COIL, OSC |
| L12 | 82-794-688-019 | COIL, OSC LW |
| L13 | 87-003-152-089 | COIL, 100UH |
| L14 | 87-008-421-019 | COIL FILTER AMTI-BIR DIE |
| L15 | 87-003-152-089 | COIL, 100UH |
| L16 | 87-003-152-089 | COIL, 100UH |
| MFI1 | 87-008-460-019 | FILTER, CFMT 450PS |
| SFR1 | 87-024-173-089 | SFR, 22K DIA6 V |
| SFR2 | 87-024-172-089 | SFR, 10K DIA6 V |
| TC1 | 87-011-219-089 | CAP, TRIMMER 10P VCT |
| TC2 | 87-011-219-089 | CAP, TRIMMER 10P VCT |
| TC3 | 87-011-219-089 | CAP, TRIMMER 10P VCT |
| TC4 | 87-011-221-089 | TRIMMER. 30P VCT51 |
| TC5 | 87-011-220-089 | CAP, TRIMMER 20P VCT |
| VC1 | 87-026-360-080 | VARICAP, CHIP KV1430 |
| VC2 | 87-026-360-080 | VARICAP, CHIP KV1430 |
| VC3 | 87-026-360-080 | VARICAP, CHIP KV1430 |
| VC4 | 87-026-360-080 | VARICAP, CHIP KV1430 |
| VC5 | 81-754-634-019 | VARICAP, CHIP KV1260 |
| X1 | 87-030-243-019 | VIB, XTAL 7.2 MHZ |
| X2 | 87-030-218-019 | VIB, CERAMIC KBR-457 HS15 |
| ===MAIN CIRCIUT BOARD SECTION=== | | |
| C30 | 87-018-149-019 | CAP, CERA-SOL SS 15P-50 CH(HR, Z) |
| C38 | 87-018-134-089 | CAP, CERA-SOL SS 0.01-16 Y(HR, Z) |
| C39 | 87-018-134-089 | CAP, CERA-SOL SS 0.01-16 Y(HR, Z) |
| C42 | 87-018-127-089 | CAP, CERA-SOL SS 470P-50 B(Z) |
| C90 | 87-018-134-089 | CAP, CERA-SOL SS 0.01-16 Y(Z) |
| ===SUB CIRCUIT BOARD SECTION=== | | |
| C250 | 87-018-132-089 | CAP, CERA-SOL SS 2200P-16 X(Z) |
| C251 | 87-018-132-089 | CAP, CERA-SOL SS 2200P-16 X(Z) |
| ===ANT CIRCUIT BOARD SECTION=== | | |
| J2 | 87-099-315-019 | TERMINAL, ANT FM(Z) |
| FC701 | 81-NKB-633-119 | FLAT CABLE 2P ANT(Z) |

# MECHANICAL PARTS LIST (RDX – 01)

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 1-24 | 81-NKB-022-019 | PLATE, SPEC (HR) | ※ | 1 |
| | 1-30 | 81-NKB-044-019 | CABINET, REAR (Z) | ※ | 1 |

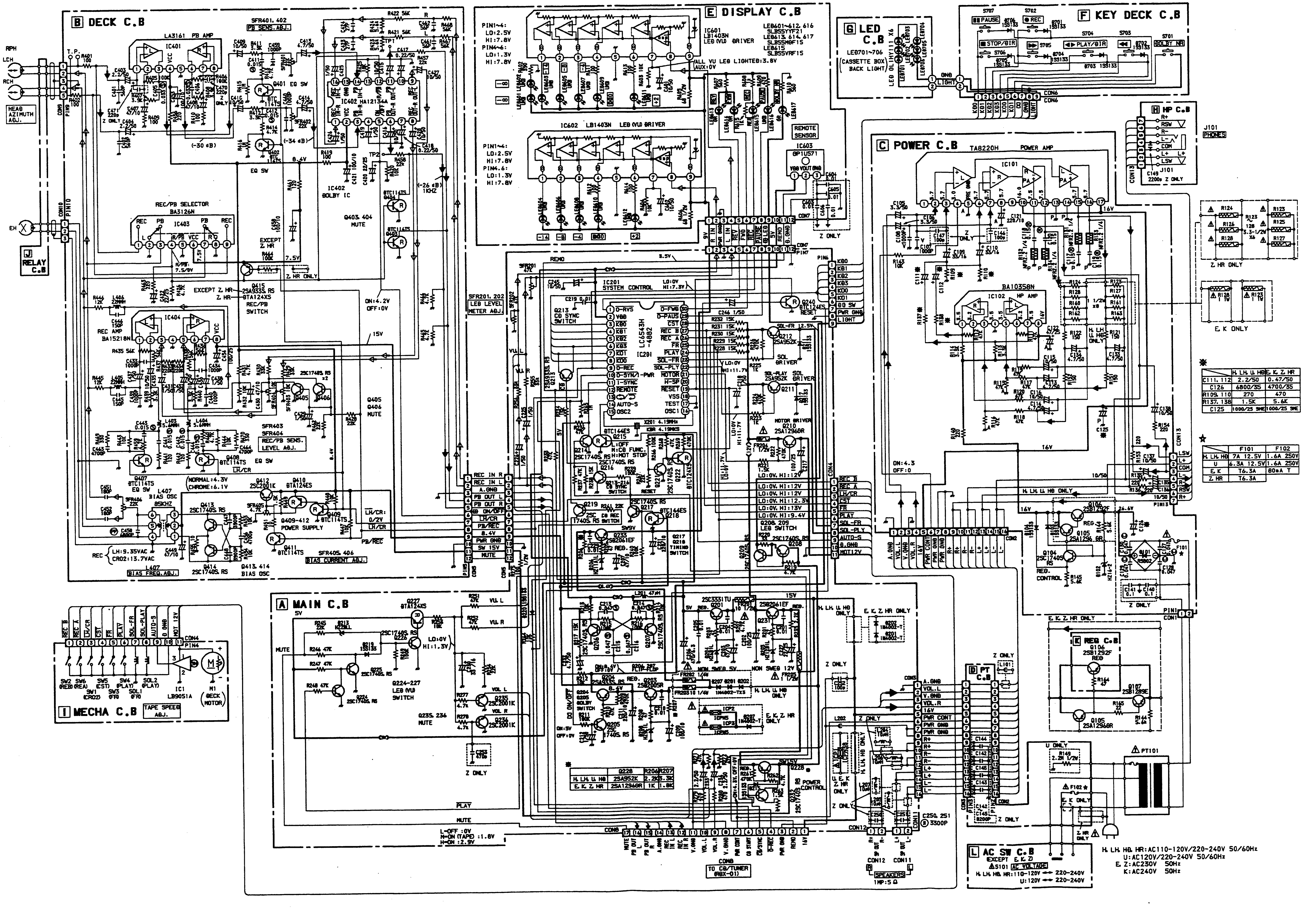
# WIRING – 1 (FX – 01)


AC 230V 50Hz
PT101
CON1
TO C POWER C.B PIN1
A MAIN C.B
SPEAKERS IMP: 5Ω
CON11 L
CON12 R
CON8 TO CD/TUNER RDX-01
D PT C.B
C POWER C.B
K REG C.B
LED701 ~ LED706 (CASSETTE BOX BACK LIGHT)
G LED C.B
S707 ❚❚ PAUSE
S706 ■ STOP/DIR
S705 ▶▶
S704 ◀▶ PLAY/DIR
S703 ◀◀
S702 ● REC
S701 DOLBY NR
F KEY DECK C.B
CON6 TO A MAIN C.B PIN6
J101 PHONES
TO C POWER C.B PIN13
CON13
H HP C.B
I MECHA C.B
SW2 (REB)
SW1 (CrO2)
SW5 (CST)
SW6 (REA)
SW3 (FR)
SW4 (PLAY)
SOL1 (FR)
IC201
CON7
CON4
CON5
CON3

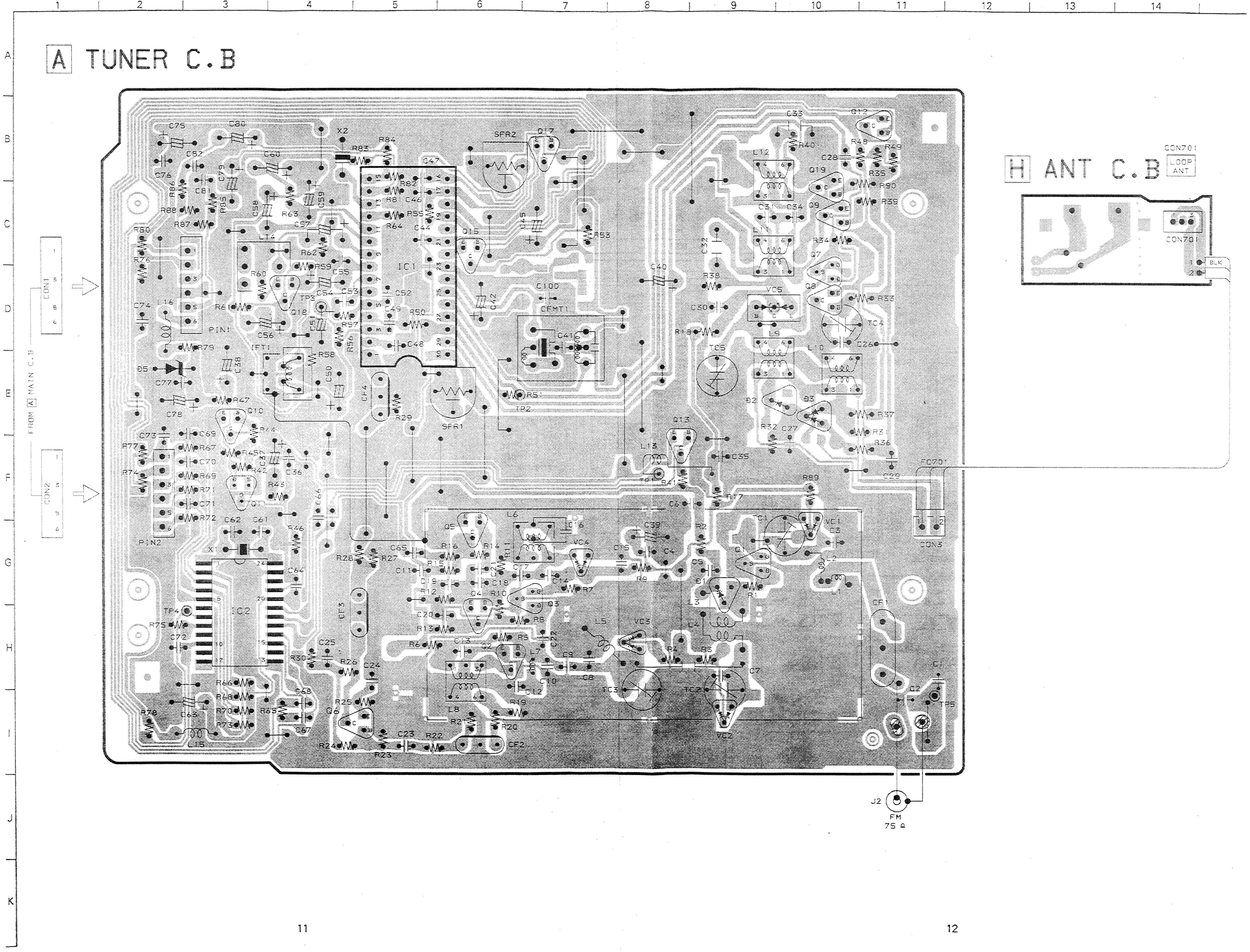


8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
SPEAKERS IMP: 5Ω
CON11 L
CON12 R
CON8 TO CD/TUNER RDX-01
A MAIN C.B
B DECK C.B
RPEH
J RELAY C.B
TO B DECK C.B PIN9
TO B DECK C.B PIN10
PT C.B
REG C.B
LED706 (BACK LIGHT)
LED704
LED705
LED706
S704 PLAY/DIR
S703
S702 ● REC
S701 DOLBY NR
CON6
TO A MAIN C.B PIN6
IC201
IC401
IC402
IC403
IC404
CON7
TAPE FUNCTION/LEVEL METER
LED614 ▶ FWD
LED613 ◀ REV
L dB R
LED611 +2 LED612
LED609 LED610
LED607 -4 LED608
LED605 -8 LED606
LED603 -14 LED604
LED601 -∞ LED602
LED617 DOLBY NR
LED616 PAUSE
LED615 REC
IC603 REMOTE SENSOR
IC601
IC602
IC603
E DISPLAY C.B
I MECHA C.B
CON4
SW2 (REB)
SW1 (Cr02)
SW5 (CST)
SW6 (REA)
PIN4
SOL1 (FR)
SOL2 (PLAY)
SW4 (PLAY)
SW3 (FR)
IC1
M1 (DECK MOTOR)
(WHT)

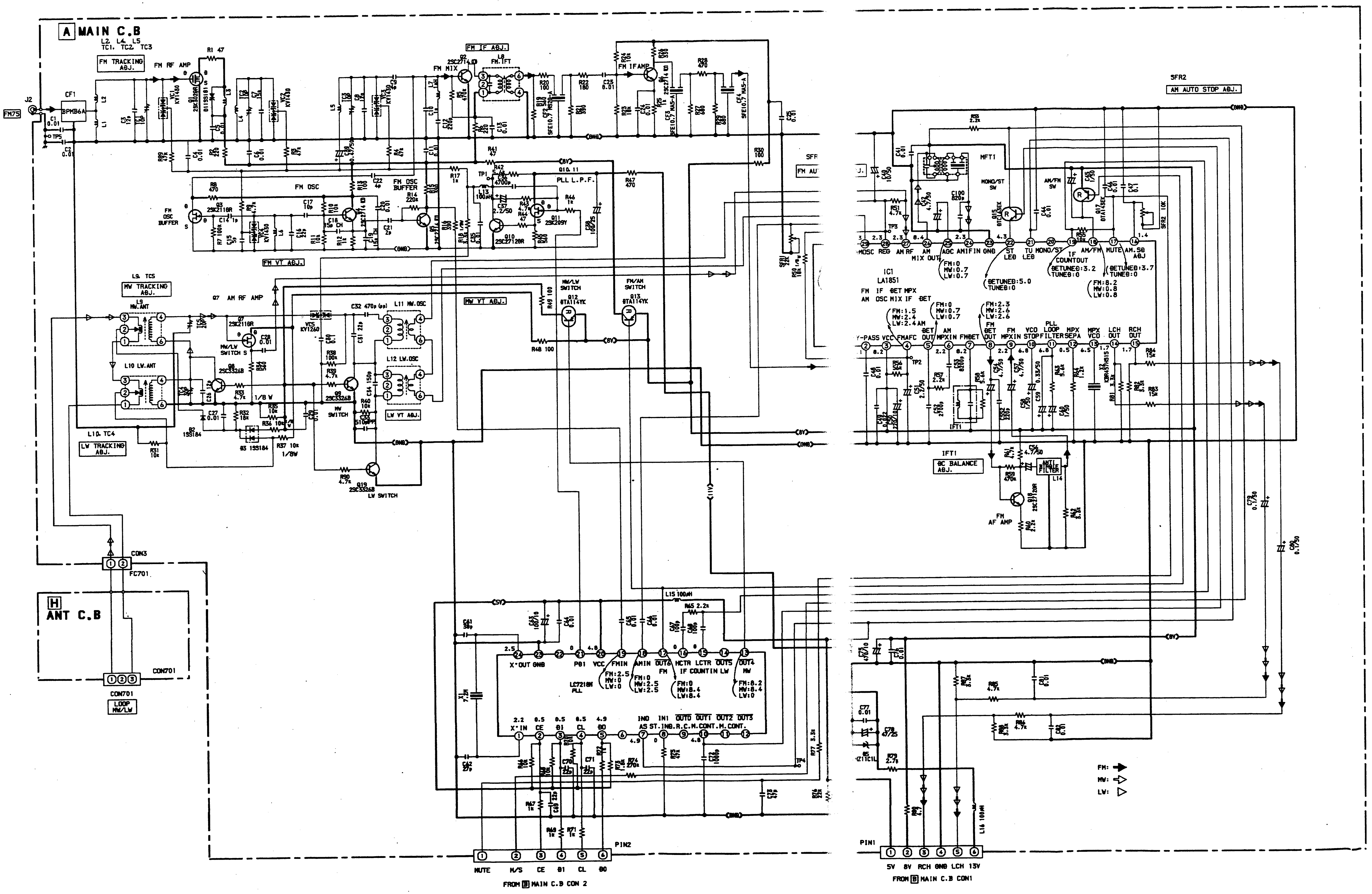
SCHEMATIC DIAGRAM – 1 (FX – 01)


B DECK C.B
LA3161 PB AMP
IC401
HA12134A
IC402 DOLBY IC
REC/PB SELECTOR
BA3126N
IC403
IC404
REC AMP
BA15218N
J RELAY C.B
HEAD AZIMUTH ADJ.
BIAS OSC
BIAS FREQ. ADJ.
BIAS CURRENT ADJ.
PB SENS. ADJ.
REC/PB SENS. LEVEL ADJ.
E DISPLAY C.B
IC601 LB1403N LED (VU) DRIVER
IC602 LB1403N LED (VU) DRIVER
G LED C.B
F KEY DECK C.B
H HP C.B
J101 PHONES
REMOTE SENSOR
IC603 GP1U571
IC201 SYSTEM CONTROL
LC6543H -4082
C POWER C.B
TA8220H POWER AMP
IC101
BA10358N
IC102 HP AMP
A MAIN C.B
I MECHA C.B
IC1 LB9051A
M1 DECK MOTOR
TAPE SPEED ADJ.
D PT C.B
K REG C.B
L AC SW C.B
PT101
SPEAKERS
CON8 TO CD/TUNER (RBX-01)
H, LH, HB, HR: AC110-120V/220-240V 50/60Hz
U: AC120V/220-240V 50/60Hz
E, Z: AC230V 50Hz
K: AC240V 50Hz

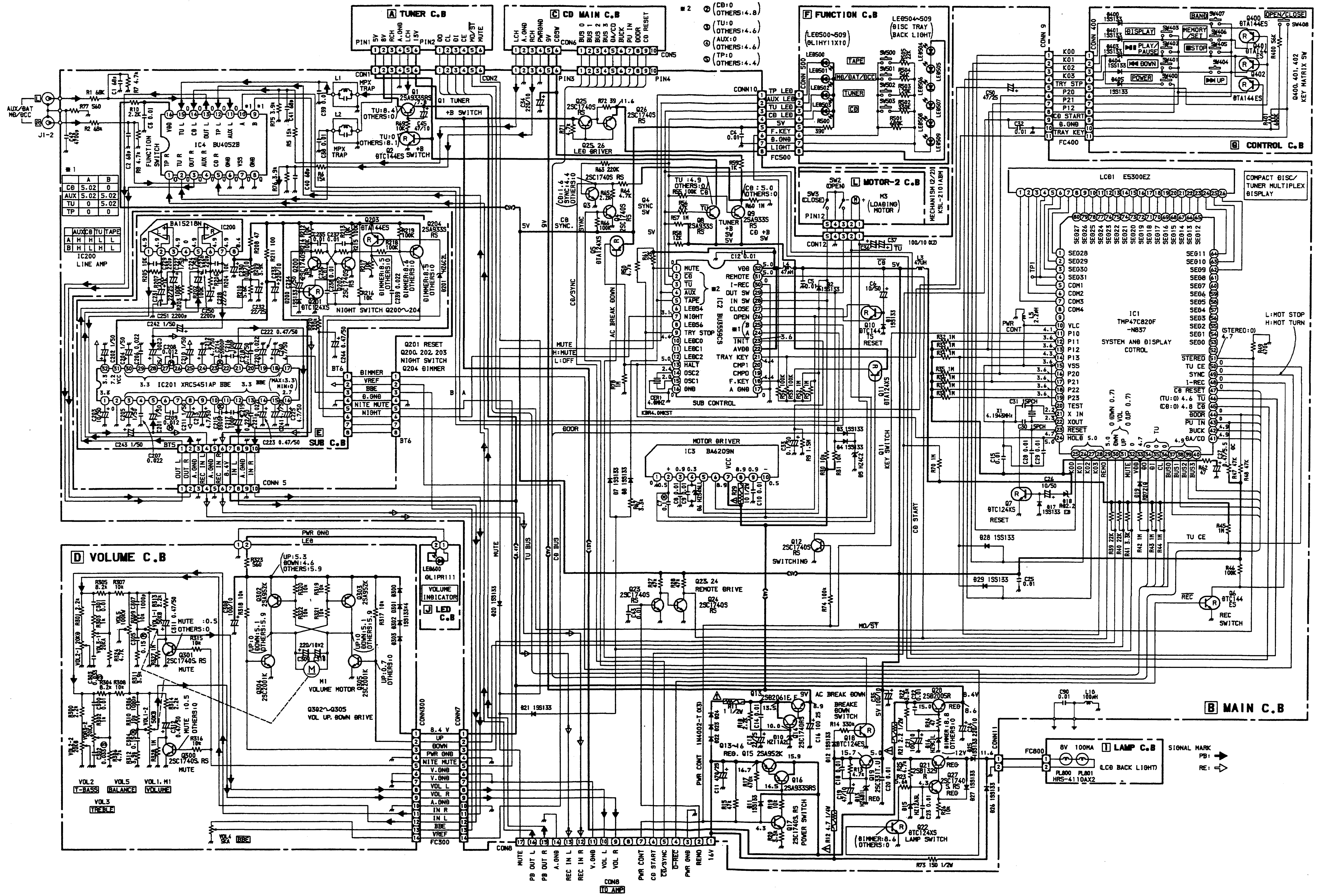
# WIRING – 2 (RDX – 01 : TUNER) <Z>


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
K
A TUNER C.B
H ANT C.B
CON701
LOOP ANT
CON701
BLK
1
2
FROM A MAIN C.B
CON1
CON2
PIN1
PIN2
IC1
IC2
X1
X2
SFR1
SFR2
CFMT1
IFT1
CF1
CF2
CF3
CF4
FC701
CON3
TP1
TP2
TP3
TP4
TP5
VC1
VC2
VC3
VC4
VC5
TC1
TC2
TC3
TC4
TC5
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
L12
L13
L14
L15
L16
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
Q15
Q17
Q18
Q19
D1
D2
D3
D5
J2
FM
75 Ω

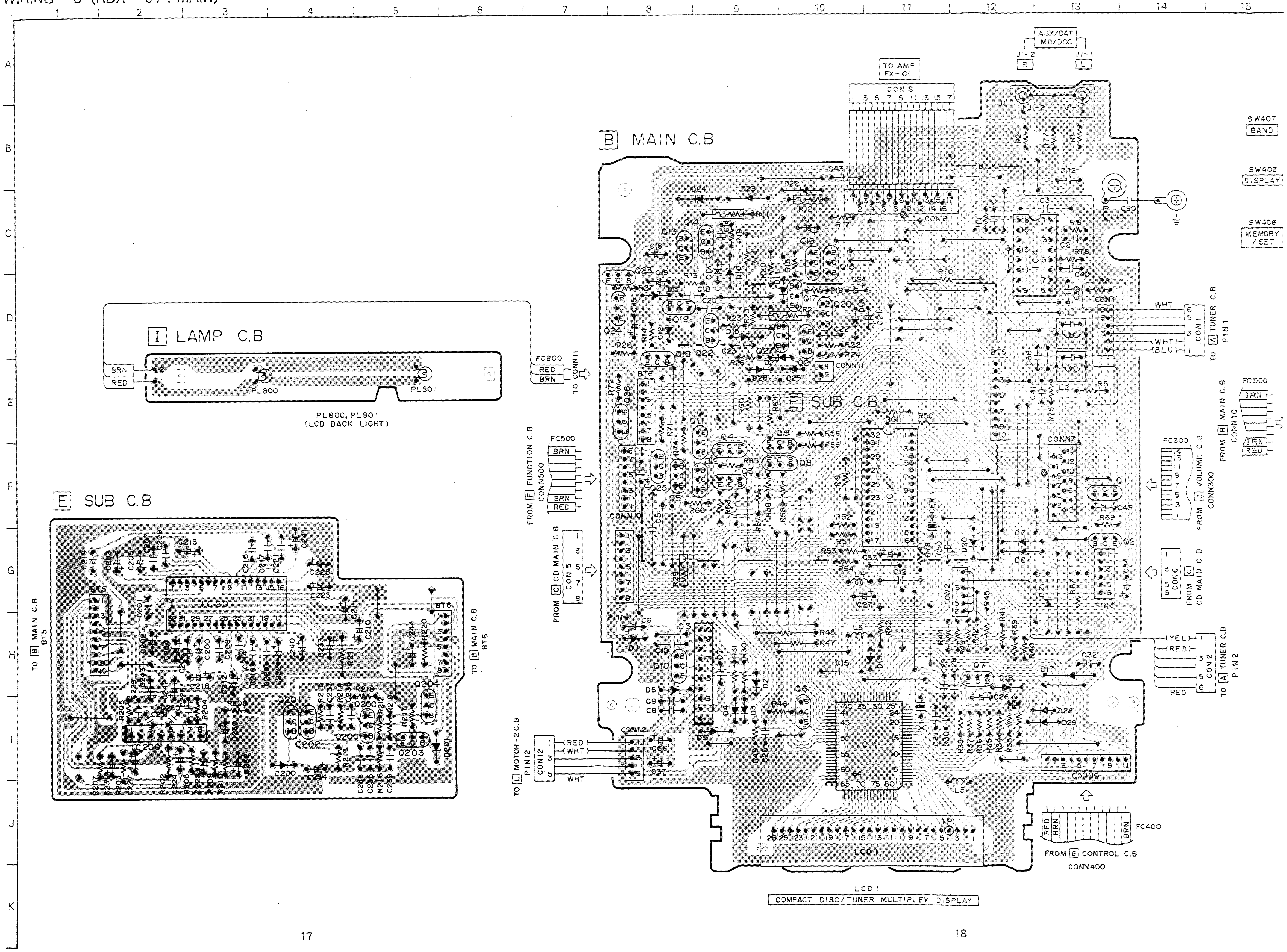
## SCHEMATIC DIAGRAM – 2 (RDX – 01 : TUNER) < Z >


A MAIN C.B
L2, L4, L5
TC1, TC2, TC3
FM TRACKING ADJ.
FM RF AMP
FM IF ADJ.
FM MIX
FM IFT
FM IF AMP
AM AUTO STOP ADJ.
SFR2
FM75
J2
CF1
BPMB6A
TP5
FM OSC
FM OSC BUFFER
PLL L.P.F.
TP1
FM VT ADJ.
MW TRACKING ADJ.
L9 MW.ANT
Q7 AM RF AMP
L10 LW.ANT
L10, TC4
LW TRACKING ADJ.
MW/LW SWITCH
L11 MW.OSC
L12 LW.OSC
MW VT ADJ.
LW VT ADJ.
MW SWITCH
LW SWITCH
MW/LW SWITCH
FM/AM SWITCH
MFT1
MONO/ST SW
AM/FM SW
IC1
LA1851
FM IF DET MPX
AM OSC MIX IF DET
IFT1
SC BALANCE ADJ.
ANTI FILTER
L14
FM AF AMP
CON3
FC701
H ANT C.B
CON701
LOOP MW/LW
L15 100μH
LC7218M
PLL
L16 100μH
PIN1
5V 8V RCH GND LCH 13V
FROM B MAIN C.B CON1
PIN2
MUTE M/S CE DI CL DO
FROM B MAIN C.B CON 2
FM: ➡
MW: ⇨
LW: ▷

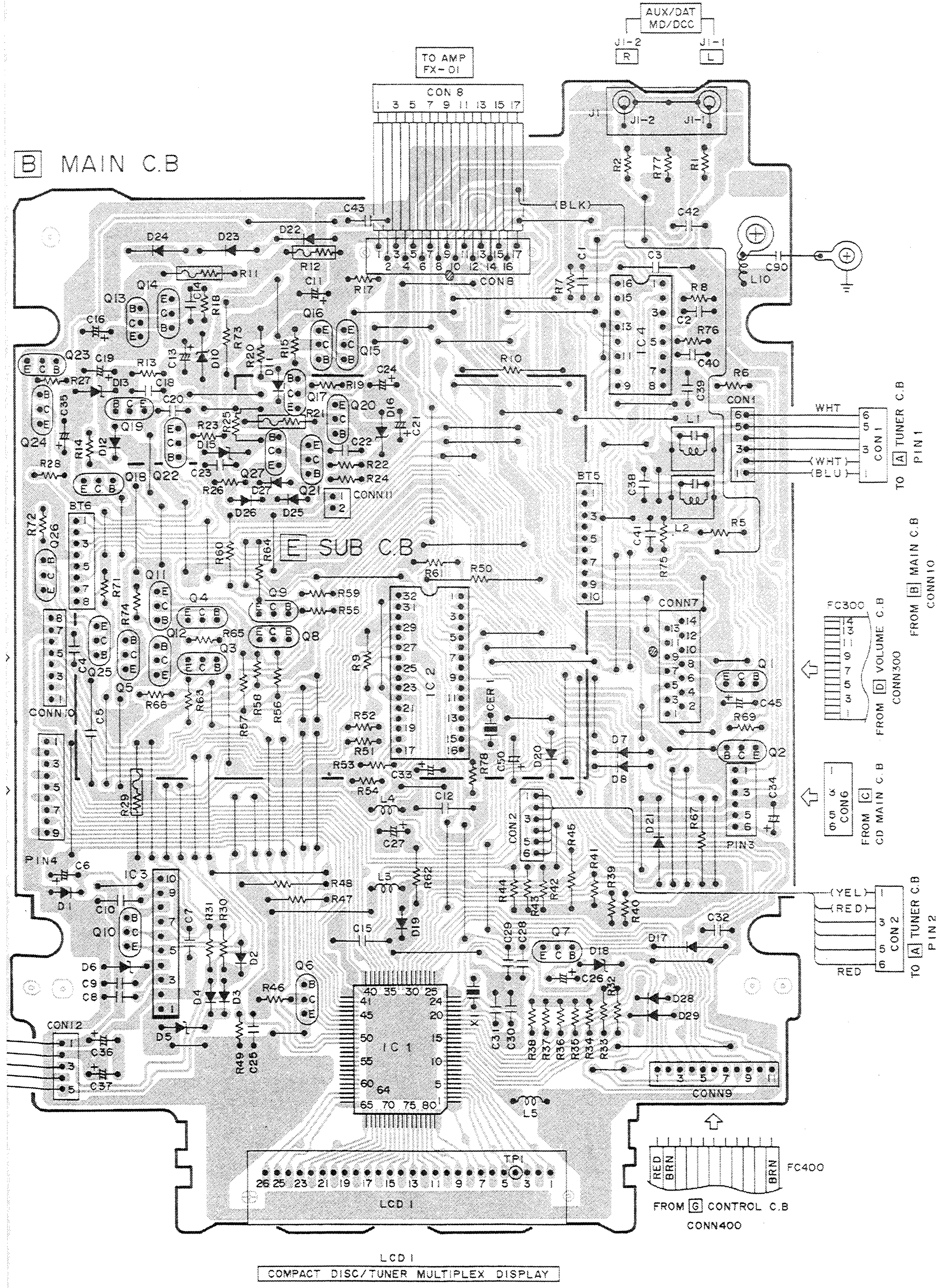
# SCHEMATIC DIAGRAM – 3 (RDX – 01 : MAIN)

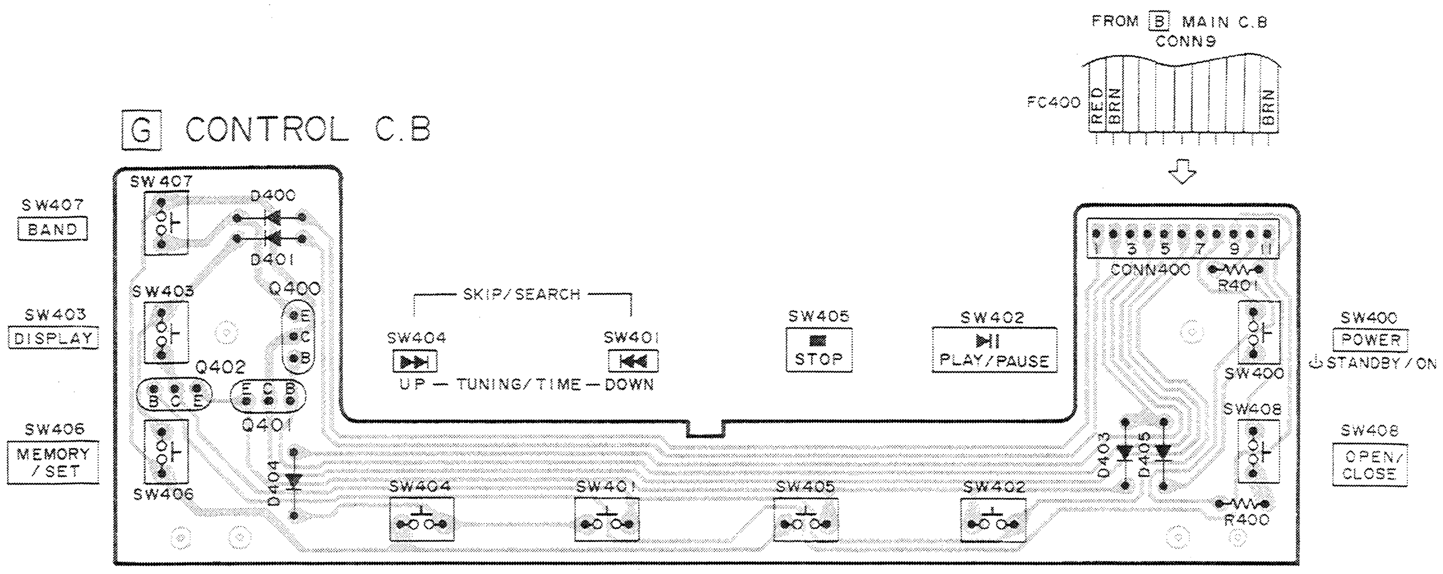

A TUNER C.B
C CD MAIN C.B
F FUNCTION C.B
G CONTROL C.B
L MOTOR-2 C.B
E SUB C.B
D VOLUME C.B
J LED C.B
B MAIN C.B
I LAMP C.B
AUX/BAT MD/BCC
J1-2
IC4 BU4052B
IC200 BA15218N LINE AMP
IC201 XRC5451AP BBE
IC2 BU3555CS SUB CONTROL
IC3 BA6209N MOTOR DRIVER
IC1 TMP47C820F -N837 SYSTEM AND DISPLAY COTROL
LCD1 ES300EZ
COMPACT DISC/ TUNER MULTIPLEX DISPLAY
L:MOT STOP H:MOT TURN
M1 VOLUME MOTOR
Q302~Q305 VOL UP, DOWN DRIVE
VOL2 T-BASS
VOL5 BALANCE
VOL1, M1 VOLUME
VOL3 TREBLE
CON8 TO AMP
SIGNAL MARK PB: RE:
PL800 PL801 HRS-4110AX2 (LCD BACK LIGHT)

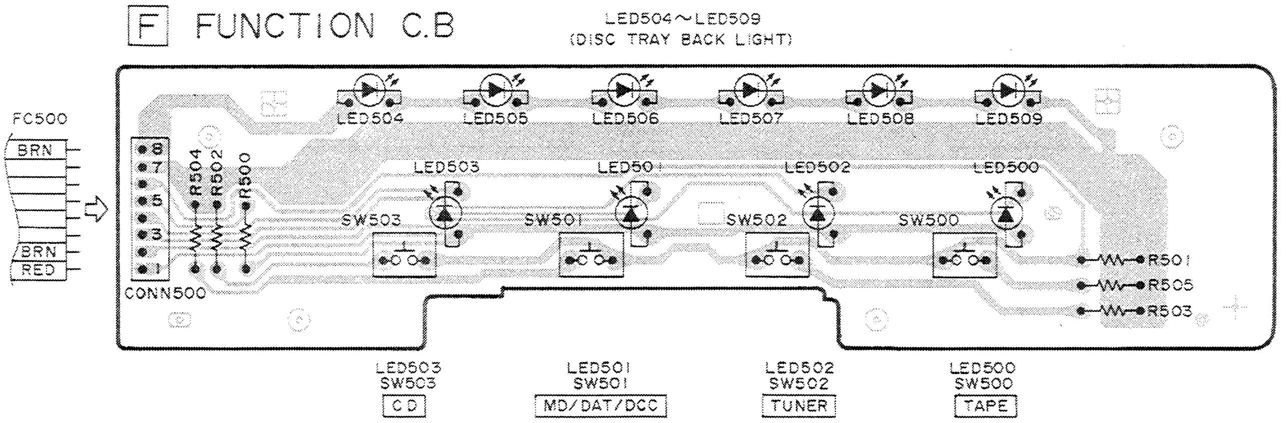
# WIRING – 3 (RDX – 01 : MAIN)

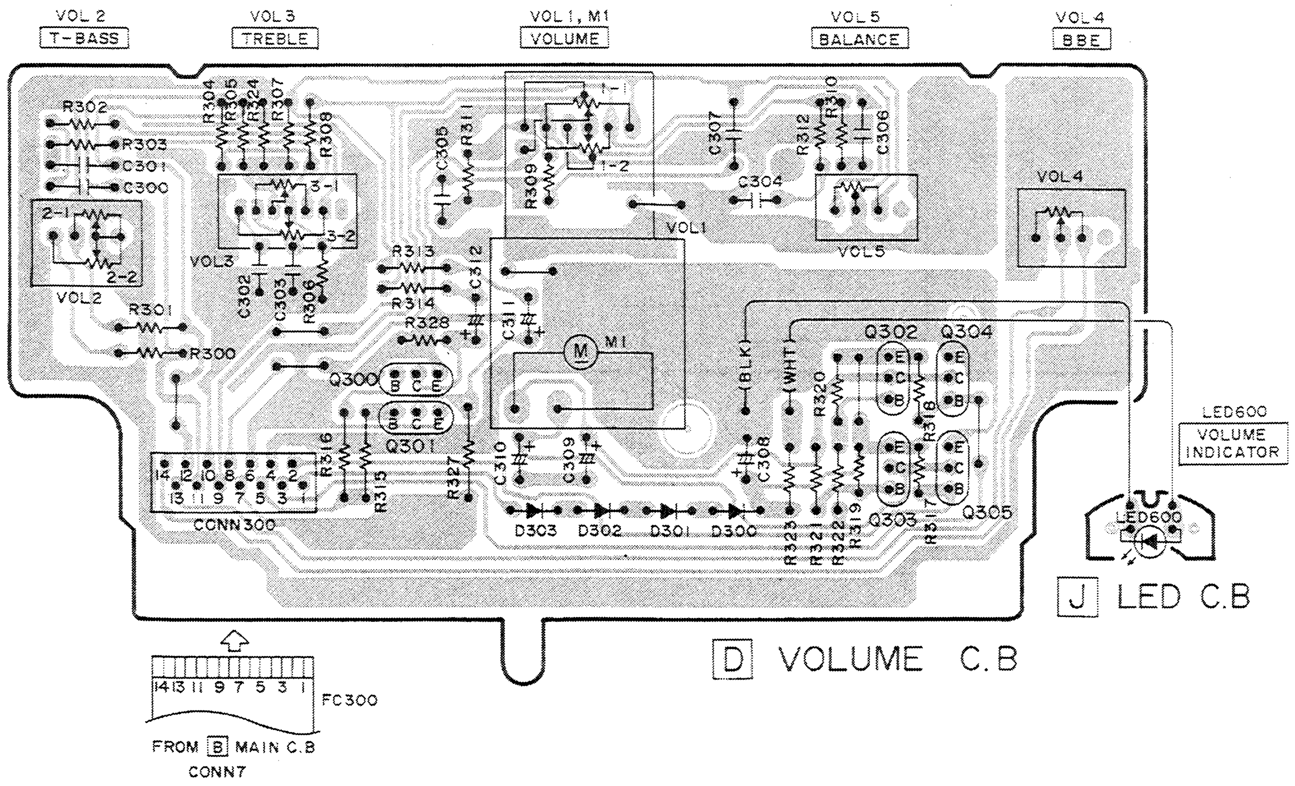

B MAIN C.B
I LAMP C.B
E SUB C.B
E SUB C.B
TO AMP FX-01
CON 8
AUX/DAT MD/DCC
J1-2 R
J1-1 L
SW407 BAND
SW403 DISPLAY
SW406 MEMORY /SET
TO A TUNER C.B PIN1
CON 1
(WHT)
(BLU)
WHT
TO A TUNER C.B PIN2
CON 2
(YEL)
(RED)
RED
FROM B MAIN C.B CONN10
FC500
BRN
RED
FROM D VOLUME C.B CONN300
FC300
FROM C CD MAIN C.B
CON6
FROM G CONTROL C.B CONN400
FC400
LCD 1
COMPACT DISC/TUNER MULTIPLEX DISPLAY
TO L MOTOR-2 C.B PIN12
CON12
(RED)
(WHT)
FROM C CD MAIN C.B CON 5
FROM F FUNCTION C.B CONN500
FC500
FC800
TO CONN11
PL800
PL801
PL800, PL801 (LCD BACK LIGHT)
TO B MAIN C.B BT5
TO B MAIN C.B BT6
IC 1
IC 2
IC 3
IC 4
IC201
IC200
CONN7
CONN9
CONN10
CONN11
BT5
BT6
PIN3
PIN4
X1
CER 1
TP1
(BLK)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K

8 9 10 11 12 13 14 15 16 17 18 19 20 21 22


B MAIN C.B
E SUB C.B
TO AMP FX-01
CON 8
AUX/DAT MD/DCC
J1-2 R
J1-1 L
J1
(BLK)
IC4
IC2
IC3
IC1
CON1
WHT
(WHT)
(BLU)
TO A TUNER C.B CON1 PIN1
FROM B MAIN C.B CONN10
FC300
FROM D VOLUME C.B CONN300
FROM C CD MAIN C.B CON6
(YEL)
(RED)
RED
TO A TUNER C.B CON2 PIN2
BT5
BT6
CONN7
CONN9
CONN10
CONN11
CON2
CONN12
PIN3
PIN4
TP1
LCD1
FROM G CONTROL C.B CONN400
FC400
RED
BRN
BRN
LCD1
COMPACT DISC/TUNER MULTIPLEX DISPLAY


FROM B MAIN C.B CONN9
FC400
RED
BRN
BRN
G CONTROL C.B
SW407 BAND
SW403 DISPLAY
SW406 MEMORY /SET
SKIP/SEARCH
SW404
SW401
UP — TUNING/TIME — DOWN
SW405 STOP
SW402 PLAY/PAUSE
SW400 POWER ⏻STANDBY/ON
SW408 OPEN/CLOSE
CONN400
D400
D401
Q400
Q401
Q402
D403
D404
D405
R400
R401


F FUNCTION C.B
LED504～LED509
(DISC TRAY BACK LIGHT)
FC500
BRN
BRN
RED
FROM B MAIN C.B CONN10
CONN500
LED504
LED505
LED506
LED507
LED508
LED509
LED503
LED501
LED502
LED500
SW503
SW501
SW502
SW500
R500
R501
R502
R503
R504
R505
LED503 SW503 CD
LED501 SW501 MD/DAT/DCC
LED502 SW502 TUNER
LED500 SW500 TAPE


VOL2 T-BASS
VOL3 TREBLE
VOL1, M1 VOLUME
VOL5 BALANCE
VOL4 BBE
VOL1
VOL2
VOL3
VOL4
VOL5
M1
(BLK)
(WHT)
Q300
Q301
Q302
Q303
Q304
Q305
D300
D301
D302
D303
CONN300
LED600 VOLUME INDICATOR
LED600
J LED C.B
D VOLUME C.B
FC300
FROM B MAIN C.B CONN7

# ADJUSTMENT (RDX－01)

## (TUNER SECTION)

**HR :** Refer to the H Model on pages 74 and 75 of LCX-01 (H, LH, U, E, K and HD) except for No.8 AM (MW) Auto Stop Adjustment.

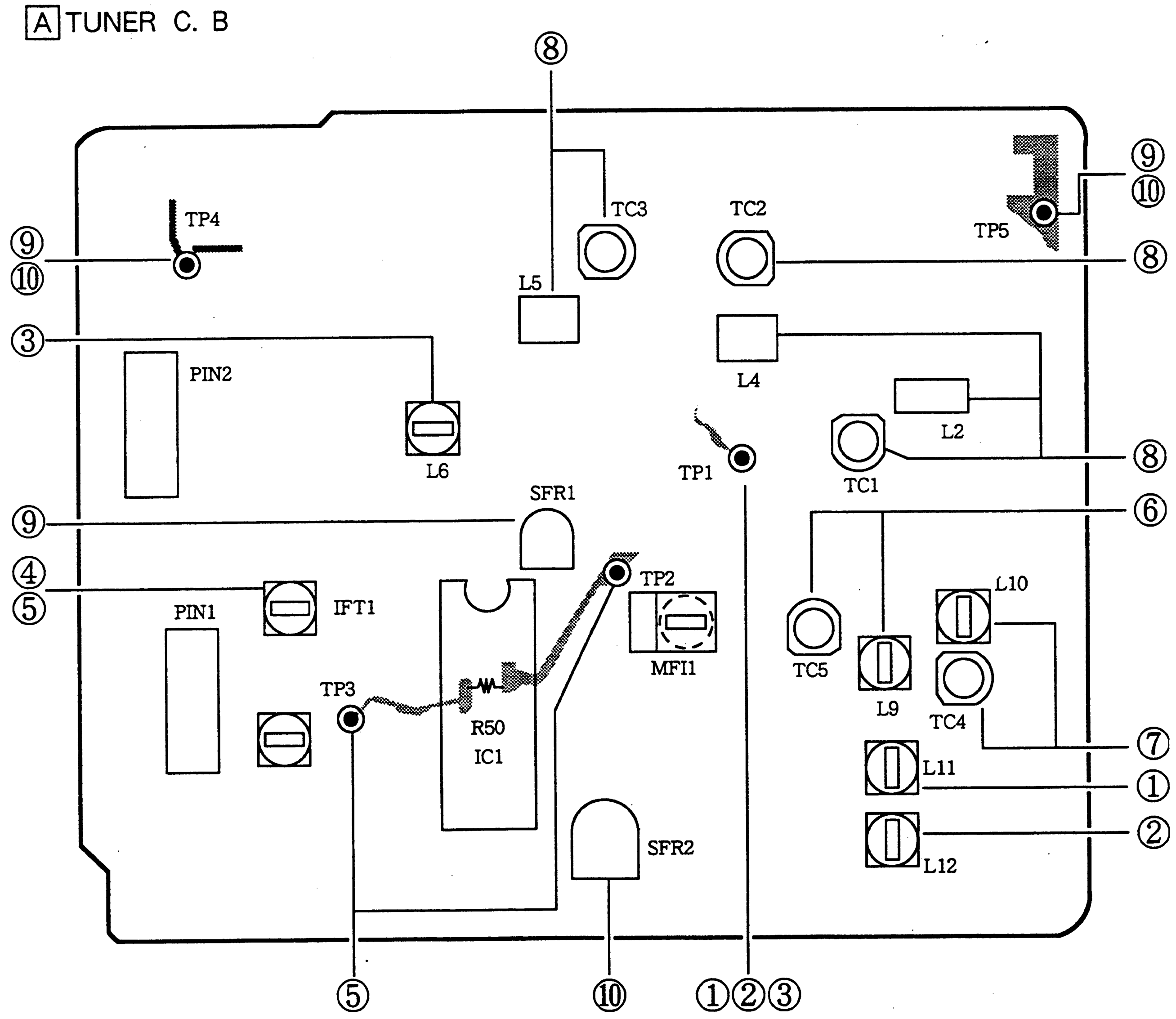
8. AM (MW) Auto Stop Adjustment

Settings :
- Test point : TP4 (GND), TP5
- Adjustment location : SFR2
- Input level : 55dB

Method :
1) Set to AM (MW) 999kHz and adjust "TUNED" of LCD display to light on by SFR2.
2) "TUNED" of LCD display goes out by 2dB down.

**Z :**

### A TUNER C. B



1. MW VT Adjustme

Settings :
- Test : TP1
- Adju location : L11
- Set nction to MW mode.

Method :
1) Set W 522kHz and adjust so that the point becomes 1.0 ± 0.05V.
2) Se MW 1611kHz and check VT vo at the test point are within 7.7 .

2. LW VT Adjustme

Adjust the MW V re adjusting the LW VT.

Settings :
- Test : TP1
- Adju location : L12
- Set nction to LW mode.

Method :
1) Se W 153kHz and adjust so that the point becomes 1.3 ± 0.05V.
2) Se W 288kHz and check the VT vo t the test point is 5.7 ± 0.5V.

3. FM VT Adjustmen

Settings :
- Test : TP1
- Adju location : L6
- Set nction to FM mode.

Method :
1) Se M 108MHz and adjust so that the point becomes 9.0 ± 0.05V.
2) Se M 87.5MHz and check the VT vo at the test point is 3.5 ± 0.5V.

4. FM IF Adjustment

IFT1 ·························· 10.7MHz

5. DC Balance Adjust

Settings :
- Test :
  TP2 us terminal side of R50)
  TP3 ( s terminal side of R50)
- SSG : 98MHz, 60dB
- Adjustment location : IFT1

Method : Set to FM 98MHz and adjust IFT1 so that the voltage between TP2 and TP3 becomes 0 ± 20mV.

6. MW Tracking Adjustment

L9 (Low) ································ 603kHz
TC5 (High) ······························ 1404kHz

7. LW Tracking Adjustment

L10 (Low) ······························· 153kHz
TC4 (High) ······························ 288kHz

8. FM Tracking Adjustment

L2, L4, L5 (Low) ························ 87.5MHz
TC1, TC2, TC3 (High) ···················· 108MHz

9. FM Auto Stop Adjustment

Settings :
- Test point : TP4, TP5 (GND)
- Adjustment location : SFR1
- Input level : 25dB

Method :
1) Set to FM 98.0MHz and adjust "TUNED" LED to light on by SFR1.
2) "TUNED" LED goes out by 1dB down.

10. MW Auto Stop Adjustment

Settings :
- Test point : TP4, TP5 (GND)
- Adjustment location : SFR2
- Input level : 50dB

Method :
1) Set to MW 999kHz and adjust "TUNED" of LCD display to light on by SFR2.
2) "TUNED" of LCD display goes out by 1dB down.

# PRACTICAL SERVICE FIGURE

## < FM SECTION >

| | |
|---|---|
| IHF Sensitivity :<br>(THD 3%) | HR (87.5~108MHz) :<br>17 ± 5dB (at 87.5MHz)<br>15 ± 5dB (at 98MHz)<br>14 ± 5dB (at 108MHz)<br>Z (87.5~108MHz) :<br>11 ± 4dB (at 87.5MHz)<br>9 ± 4dB (at 98MHz)<br>9 ± 4dB (at 108MHz) |
| S/N ratio : | HR, Z :<br>65 ± 5dB (at 98MHz) |
| Distortion :<br>(Input 54dB) | Less than 2.0% |
| Stereo separation : | HR :<br>31 ± 7dB (at 1kHz)<br>Z :<br>29 ± 5dB (at 1kHz) |
| Intermediate frequency : | 10.7MHz |
| Auto stop level : | HR :<br>30 ± 5dB (at 98MHz)<br>Z :<br>25 ± 5dB (at 98MHz) |

## < MW SECTION >

| | |
|---|---|
| Sensitivity :<br>(S/N 10dB) | HR (531~1602kHz) :<br>45 ± 5dB (at 603kHz)<br>42 ± 5dB (at 999kHz)<br>43 ± 5dB (at 1404kHz)<br>Z (522~1611kHz) :<br>56 ± 5dB (at 603kHz)<br>53 ± 5dB (at 999, 1404kHz) |
| S/N ratio : | HR, Z :<br>More than 35dB<br>(at 999kHz) |
| Intermediate frequency : | 450kHz |
| Auto stop level : | HR :<br>55 ± 5dB (at 999kHz)<br>Z :<br>50 ± 5dB (at 999kHz) |

## < LW SECTION > (Z ONLY)

| | |
|---|---|
| Sensitivity :<br>(S/N 10dB) | Z (153~288kHz) :<br>67 ± 5dB (at 153kHz)<br>64 ± 5dB (at 198kHz)<br>62 ± 5dB (at 288kHz) |
| S/N ratio : | More than 31dB<br>(at 198kHz) |